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THE

LIFE AND TIMES

OF

SAMUEL CROMPTON.







Sam! Crompton

LIFE AND TIMES

OF

SAMUEL CROMPTON

INVENTOR OF THE SPINNING MACHINE CALLED

THE MULE.

Being the Substance of Two Papers read to the Members of the Bolton Mechanics' Institution.

GILBERT J. FRENCH.

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the Bolton Mechanics Institution.



TO THE

VICE-PRESIDENTS, COMMITTEE, OFFICERS AND MEMBERS

OF THE

BOLTON MECHANICS' INSTITUTION,

THIS VOLUME,

PREPARED FOR THEIR USE AND PUBLISHED AT

THEIR REQUEST,

IS RESPECTFULLY AND AFFECTIONATELY

DEDICATED BY

THEIR FRIEND AND PRESIDENT,

GILBERT J. FRENCH.

Newport Square, Bolton, 1859.



PREFACE AND ADVERTISEMENT.

This Memoir of the Life of Samuel Crompton has been prepared for publication under the following circumstances.

It became the duty of the author, as President of the Bolton Mechanics' Institution, to make arrangements for the delivery of a series of lectures to the members during the winter session of 1858-9. These members are for the most part working men, a greater proportion of them being operative mechanics than is usually met with in other similar institutions. The funds, however, did not permit the engagement of paid lecturers, and the President was therefore obliged to solicit the gratuitous services of some personal friends, and other gentlemen connected with the borough or its neighbourhood. His appeal was heartily responded to, and resulted in the delivery of the following series of lectures, all of which were numerously attended by gratified and grateful audiences.

The Rev. Henry Powell, Vicar of Bolton, delivered two lectures upon his "Personal Recollections of the Island of Ceylon." Thomas Bazley, Esq., M.P. for Manchester, lectured upon "Trade and Commerce, the Auxiliaries of Civilization and Comfort." The Rev. R. Harries Jones, of Walmsley Church, gave one lecture "On the Affinity of European Languages;" and Henry Ashworth, Esq., J.P., delivered five of a series of lectures

"On the United States of America, Cuba, and Canada," which it is hoped may be resumed during the ensuing season. Thomas Ballantyne, Esq., delivered an address "On the best method of using a Public Library." S. T. Chadwick, Esq., M.D. Edinburgh, F.C.S. England, &c., gave a lecture (with experiments) "On Water, its Composition and Impurities;" Thomas Barnes, Esq., J.P., two lectures "On Recollections of Italian Cities;" and Robert Heywood, Esq., J.P., read "Notes of his Recent Visit to St. Petersburgh and Moscow."

To all of these gentlemen the Author gladly avails himself of this (not inappropriate) opportunity to offer his respectful and grateful thanks.

His own contribution to the lectures consisted of two papers upon "The Life and Times of Samuel Crompton," a subject of so much interest to the audience that a request was made for their publication in a permanent form, which the author did not feel himself at liberty to decline.

To Samuel Crompton, Esq., of Cavendish Place, Manchester, the Author is indebted for much valuable information, and many important documents relative to his respected grandfather; and to Robert Cole, Esq., F.S.A. London, he desires to offer his best thanks, for permission to print his valuable paper upon Lewis Paul's invention and patent.

The Life of Samuel Crompton is commended to working men as a subject for serious reflection. Holding up much for their encouragement, there is also in it much of warning, as it demonstrates that natural ability of the highest order, even when supported by education, industry, sobriety and frugality, does not exonerate any man from the duty of acquiring a knowledge of his fellow-men, and of learning how to deal with

them in the business of life. His practical disregard of this knowledge was the stumbling block that impeded every action of Samuel Crompton's life. Had he studied human nature with one tithe of the persevering skill and energy with which he devoted himself to his mechanical pursuits, his name would have ranked now among the highest in the nation, and his posterity among the wealthiest of its commercial aristocracy.

Any profits that may arise from the publication of this edition of the Life and Times of Samuel Crompton will be applied to the use of the Bolton Mechanics' Institution.



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Carved panel in "Crompton's room," Hall-in-the-Wood.

LIFE OF SAMUEL CROMPTON.

CHAPTER I.

Purpose of the Work. Birth of Samuel Crompton. Events which occurred on that day. State of Morality and Civilization in England. Parallel Events. Society of Arts. British Museum.
Change of Style. Discovery of Natural Electricity. Clive's Conquests in India. Bolton-in-the-Moors in 1753. Market for Manufactures. All Saints' Church. Population. Change of Name.

It is the purpose of this volume to record some particulars of the life of Samuel Crompton, a Bolton worthy, well known personally to many inhabitants of that town during the first quarter of the present century, though to the present generation he is only known as somewhat obscurely connected with the improvement of spinning machinery by an invention which he completed at the Hall-in-the-

Wood. It is scarcely known that his discovery gave a wonderful impulse to the industry and consequently to the wealth and population of South Lancashire, causing its insignificant villages to attain the importance of large and populous towns.

The events of his life are here narrated in simple terms, without indulging in eulogistic statements. As far as possible the facts only are stated, and all but the most necessary comments omitted. Though the theme might well excuse the use of occasional strong language, it is thought best to follow the example which Mr. Crompton has himself set before us. He never failed in writing or speaking of himself, or his invention, to use the most simple and unpretending language; his modesty in this particular being as remarkable as his inventive genius.

Samuel Crompton was born on the 3rd of December, 1753, or just about one hundred and five years ago. Two other events occurred on the same day, which assist us in acquiring a notion of the state of society at that time in England. Seven felons were executed on one

gallows at Tyburn on that morning,1 and in the afternoon a ten thousand pound prize was drawn in that immoral swindle, the State Lottery.² The cloud of the rebellion of 1745 still cast its shadow over the land, for only a few months before Samuel Crompton came into the world a gentleman of birth and learning was sent out of it, being arrested, tried, hanged, his heart while still palpitating cut from his bosom and tossed into the fire, for the offence of having eight years before acted as medical officer to his own clan of Highlanders, which his elder brother led into the field for the Pretender;3 though it was shown at the trial that he was compelled to fill the office, not only by the command of his chief (always binding on a Highlander), but by his brother's pistol held to his head, with an assurance of instant death on refusal. It must be admitted that England under the second George was very deficient in

¹ Gent. Mag. vol. xxiii. p. 587. ² Ibid.

³ Dr. Charles Archibald Cameron, of Lochiel, was executed at Tyburn on the 7th of June, 1753, under the circumstances stated above. — *Gent. Mag.* vol. xxiii. p. 292.

morality and in civilization. The state of society at that time has been admirably described by Mr. Thackeray, who has chosen this exact period for the plot of his *Virginians*. In the pleasant pages of that novel we become acquainted with the habits and customs, the dress and dissipations, even with the very mode of thinking, of our ancestors one hundred years ago. The picture, as drawn by his caustic pencil, is not in all respects a pleasant one; but it is to be feared that his sketch of English society of the upper class at that time is sadly too true.

Within the twelve months before and after the birth of our hero a wonderful spirit of renovation was evinced throughout the land, which gave rise to many institutions, inventions and discoveries of which we now reap the advantage. The Society of Arts,⁴ now one of the most flourishing and important institutions in the kingdom, dates its birth with that of

⁴ The Society for the Encouragement of Arts, Manufactures and Commerce was founded in 1753.— The Learned Societies of the United Kingdom, by the Rev. Dr. Hume, p. 98.

Crompton, who (without its aid) all but perfected the art of cotton spinning. The British Museum was established, and its trustees held their first meeting when Samuel was one day old. 5 About the same time the Society of Antiquaries was incorporated by royal charter; the conflicting styles of date were assimilated; Benjamin Franklin discovered natural electricity; and Clive commenced his splendid series of conquests in India which, after enriching generations of merchant princes, has now eventuated in that Eastern Empire whose crown rests on the head of our august and gracious queen Victoria. These great events have been singularly developed during the century which has intervened between their commencement and this present time; and such, also, has been the case with the no less important invention of Samuel Crompton, which, after he has been long dead and his memory almost forgotten, continues to aid the progress of civilization, morality and religion, by its direct influence in

⁵ December 4th (1753). The trustees of the British Museum met for the first time at the Cockpit.—Wade's *British History*, p. 443.

clothing the cold and the naked all over the world.

It is difficult to describe exactly Bolton-inthe-Moors as it was in 1753; but some idea of it may be gathered by supposing a long, irregularly built street, commencing at the east end in the church-yard and continuing as a double row of closely packed houses about half the length of the present Deansgate; after which, fields and gardens intervened among the dwellings. From this street Bank-street branched to the north,⁶ and Bradshawgate to the south; they were both short and unimportant. At their intersection with Churchgate and Deansgate the market cross⁷ was placed,

⁶ Bank-street, formerly called Windy Bank, though a principal thoroughfare, was, in the memory of inhabitants still living, so very narrow that it was necessary for foot passengers to step into some shop or doorway to avoid being crushed by any passing cart.

⁷ Within a few yards of this spot, James seventh Earl of Derby, K.G., suffered decapitation on the 15th of October, 1651. His Lordship was distinguished by his devotion to the royal cause during the Civil War. Lathom House, one of his residences, having been besieged by the Parliamentary troops, was gallantly and successfully defended by his Countess, Charlotte

and about it the wealthier inhabitants had their dwellings. Gardens, meadows and bleaching crofts, dotted here and there with cottages, stretched on the north side down to the Croal, then a pleasant stream of pure water; and, besides the comparatively considerable suburb of Little Bolton, the neighbourhood of the town was thickly studded with groups of cottages in

de la Tremouille. The troops having retired to Bolton were there attacked by the King's forces under Prince Rupert, the Earl of Derby leading the assault and being the first to enter the town, which was taken after much slaughter on the 28th of May, 1644. The Earl fell into the hands of the Parliamentary troops after the battle of Worcester, was conveyed to Chester Castle, and tried by a military commission. He was sentenced to death within four days at Bolton, in cruel retaliation of his previous success in the attack on that town. appears to have been much beloved by the inhabitants, who refused to give any assistance in erecting the scaffold. The Earl caused the block to be so placed that his last look on earth might be directed to the parish church. A paper with the following couplet is said to have been placed in his coffin by an unknown hand:

"Wit, bounty, courage, — all three here in one lie dead;
A Stanley's hand, Vere's heart, and Cecil's head."

The site of this tragedy is unmarked by any memorial.

hamlets, or *folds* as they are here called, many of which have since been surrounded by new houses and now form part of the town itself. There were no tall chimneys in Bolton in these days, but many considerable warehouses to contain the heavy fustians and other piece-goods made in the neighbourhood.

A weekly market was then, as now, held on Monday, at which a large amount of business was transacted with merchants from London and Manchester, who frequented it to purchase the heavy fabrics for which Bolton was then the principal mart. Other merchants also visited it from the north of Ireland to sell the linen yarn spun there and used in Bolton for warps; for cotton warps were not at that period so made as to be available for the strong fustians then much in demand. Bolton was at that time in some measure dependent upon Belfast and its neighbourhood, just as Bradford is at the present day indebted to Bolton for the warps required by its stuff manufacturers. Though there were warehouses and market halls for the transaction of business, nevertheless a great quantity of the fabrics, rough from

the loom, were pitched in the open street, or under rude piazzas erected in front of the shops but which are now almost all swept away. The fustians, herring-bones, cross-overs, quiltings, dimities and other goods were carried to market by the small manufacturers (who were for the most part equally small farmers) in wallets balanced over one shoulder, while on the other arm there was often hung a basket of fresh butter. The cotton goods sold in the market were invariably unbleached; the merchants causing them to be bleached, dyed and finished to suit the market for which they were intended. Much of the bleaching however was done at crofts in and about Bolton: and the bleachers and dyers were thus regular frequenters of the Monday markets, receiving there the orders and transacting that part of their business which is now transferred to Manchester

Bolton must have been a bustling, busy town on these market Mondays. It had many considerable inns, most of them having large yards behind with ample stabling for the long strings of packhorses required for the conveyance of the raw materials and the manufactured goods which changed hands on these market days.⁸ The merchants also all travelled on horseback, but the manufacturers at that time were well enough content to trudge on foot.

⁸ The roads in Lancashire were at this time so badly made as to be almost useless for wheeled carriages. The following account of the road between Preston and Wigan in 1770 is extracted from Arthur Young's Tour through the North of England, vol. iv. p. 580: "I know not in the whole range of language terms sufficiently expressive to describe this infernal road. To look over a map and perceive that it is a principal one, not only to some towns, but even to whole counties, one would naturally conclude it to be at least decent; but let me most seriously caution all travellers who may accidentally purpose to travel this terrible country, to avoid it as they would the devil; for a thousand to one but they break their necks or their limbs by overthrows or breakings down. They will here meet with ruts, which I actually measured, four feet deep, and floating with mud only from a wet summer; what, therefore, must it be after a winter? The only mending it in places receives, is the tumbling in some loose stones, which serve no other purpose but jolting a carriage in the most intolerable manner. These are not merely opinions, but facts, for I actually passed three carts broken down in these eighteen miles of execrable memory."

It was only during the year before that in which Samuel Crompton was born that a second church was required for the inhabitants of Bolton and its neighbourhood. All Saints' Church was then finished; it could, however, scarcely be said to be in the town, as for a long time after it was best known by the name of The Chapel-in-the-Fields, such being the fact of its situation at that time. There was then only one other place of worship in Bolton besides the Parish Church, and that was Bank-street Chapel, which had been built in 1696.9 Duke's-Alley Independent Chapel was built in the year after Crompton's birth, and Ridgway-Gates Methodist Chapel twelve years later.

Except on market days, a hundred years ago Bolton must have been comparatively speaking a dull and dreary place. The exact number of inhabitants then resident in the town cannot be accurately stated, as no census exists earlier than 1773 or twenty years after Crompton's birth. There were then in Great and Little

⁹ Rise and Progress of Nonconformity in Bolton, by the Rev. Franklin Baker, M.A., p. 34.

Bolton only 5,339 people, 10 or somewhat less than the present population of Farnworth or of Tyldesley. There must have been, however, a very great increase during the first twenty years of Crompton's life, and also a considerable addition to the material comforts of the people, if one can trust to the information of Dr. Aiken, who, in his Description of the Country Forty Miles round Manchester, published in 1795, says that "in the memory of some persons now living, not more than one cow used to be killed weekly in Bolton; or, if two, the unsold beef used to be sent to Bury market."11 This fact indicates not only a very small, but also a very ill-fed population. The number of fat oxen now killed in Bolton is, on

¹⁰ Dr. Aiken's Description of the Country from Thirty to Forty Miles round Manchester, p. 261. He gives the following details:

In the town of Bolton —

Houses, 946; inhabitants, 4,568

In Little Bolton and the manor -

Houses, 232; inhabitants, 771

Total 1,178 5,339

¹¹ Page 226.

an average, eighty, and sometimes reaches one hundred a week,¹² a remarkable and a very pleasing contrast.

Many of the inhabitants at that time depended for employment almost entirely on the Monday market. The inns and shops were on other days comparatively idle, and the streets all but deserted. The better class of the inhabitants at that time, and for the half century following, had thus so much leisure time to dispose of, that habits of social intercourse were established and a consequent courtesy of manners acquired which, unfortunately, has not been in every case maintained. The theatre was a fashionable and well-frequented place of amusement; and dancing assemblies were frequent and well attended. The education afforded at the Grammar School was of a high order; indeed the fact that Ainsworth the grammarian, to whom every English scholar owes a debt of gratitude, was himself educated and afterwards taught a school in Bolton, is sufficient evidence that polite literature was

¹² Information supplied by Mr Marshall of the New Market Hall.

estimated at its proper value, and produced its legitimate fruit.¹³

In 1753 Bolton was truly and literally in the Moors, being nearly surrounded by wet, sterile and gloomy wastes of almost barren land. Happily the name is no longer appropriate, as the Moors have in a great measure disappeared under the influence of increased population and improved agriculture. The modern borough of Bolton, therefore, is no longer in the Moors, that adjunct to the name being removed both in fact and by Parliamentary enactment.

¹³ The learned J. Lemprière, D.D., author of the well-known *Classical Dictionary*, was for several years upper master of the Bolton Grammar School.

14 An old soldier, Donald Mc.Bane, who published his life in a curious and now very rare little volume in the year 1727, thus mentions his experience of Bolton: "At the last rebellion (1715) I left Chalsea Colledge and Listed in General Honeywood's Regiment of Dragoons, where I was made a Sergeant. I had the Honour to guard the Standard at the Battle of Preston: after the Battle, we were ordered to ly in Bolton in the Muire of Lancaster, where by reason of the Excessive cold, and long Winter, my old wounds in my leg broke out, which caused me to draw my Discharge." p. 151.

CHAPTER II.

The Clan Crompton. Its original Locality and Antiquity. Various Branches. Eminent Men of the name. Rev. William Crompton. Richard Crompton of Bedford Lodge. Hugh Crompton, Poet. Rev. Thomas Crompton. Rev. John Crompton, &c., &c. Cromptons among the Founders of Nonconformity in Bolton.

The family or clan of Crompton has been long established in and widely diffused over the district of South Lancashire. It appears to have originated at a place called Crompton, or High Crompton, in the parish of Prestwich (situate close to Oldham), from which place the family name is derived. The pedigree of the parent line can be traced back to the time of Henry III., and it was acknowledged by the College of Heralds to be entitled to the use of armorial bearings at the Visitation of Dugdale in 1664.

Branches of the family appear to have settled at Farnworth, ¹⁵ Prestolee, ¹⁶ Breightmet, Deane, ¹⁷

¹⁵ Thomas Bonsar Crompton Esq., the last male representative of the Farnworth branch, departed this life on the 8th of September, 1858, leaving a large for-

Bedford, Chorley, Hacking Hall, and Tonge, at which latter place there is proof of their residence at least as early as 1591 from the Register of Wills in the Episcopal Registry at Chester, and of their deaths and marriages in that of

tune, honourably acquired in the manufacture of paper (through three generations of the family), by cotton spinning, and by extensive commercial connexion with the London Newspaper Press. "He was followed to the grave, amidst the silent tears and outspoken grief of the thousands of hands amongst whom he had gone in and out, as a father and friend."— Morning Post newspaper of 15th September, 1858.

¹⁶ (Page 15.) The Prestolee branch is now worthily represented by Roger Crompton of Vale House, Kersley, and St. John's Wood, London, Esq.

17 (Page 15.) George Marsh, the Protestant martyr, himself a native of Deane, appears to have been on terms of intimate friendship with the Deane branch of the Crompton (or, as he writes it, Crampton) family of his time. They are probably referred to in the following address appended to one of his long letters of religious advice and warning: "To his well beloued in Christ, Ienkin Crampton, Iames Leiuer, Elice Fogge, Ralph Bradshaw, the wife of Richard Bradshaw, Elice Crampton, and to euery one of them bee these deliuered from Lancaster. George Marsh."—Fox's Book of Martyrs, ed. 1631, vol. iii. p. 237.

the Parish Church of Bolton. Indeed the very earliest marriage recorded in the Bolton Church Register was solemnised on the 5th of February, 1597, between "James Crompton and Dorothi Dudson of Deane." Many persons of celebrity were connected by marriage with the Crompton family. Among these may be mentioned the well known John Okey of Bolton; ¹⁸ the Rev.

¹⁸ The inscription on the tombstone of this Bolton worthy sufficiently tells the story of his life: "John Okey, the servant of God, was born in London, 1608, came into this town 1629, married Mary, daughter of James Crompton, of Breightmet, 1635, with whom he lived comfortably twenty years, and begot 4 sons and 6 daughters. Since then he lived sole till the day of his In his time were many great changes and terrible alterations —18 years civil war in England, besides many dreadful sea fights - the crown or command of England changed 8 times - Episcopacy laid aside 14 years - London burned by the papists, and more stately built again — Germany wasted 300 miles — 200,000 murdered in Ireland by the papists - this town thrice stormed, once taken and plundered. He went through many troubles and diverse conditions - found rest, joy and happiness only in holiness - the faith, fear and love of God in Jesus Christ. He died the 29 of April and lieth here buried 1684. Come, Lord Jesus, O, come

Oliver Heywood; 19 the Rev. Mr. Goodwin; 20 and more recently, Dr. Ormerod the historian

quickly. Holiness is man's happiness." On this and two neighbouring gravestones are cut the armorial bearings of his family. The inscription having become nearly illegible was carefully and conscientiously recut in 1858 by Mr. Mangnall, at the expense of Thomas Thomasson, Esq.

¹⁹ The Rev. Oliver Heywood was born March 1629 in Little Lever in the parish of Bolton, and admitted to Trinity College, Cambridge, July 1646. In 1652 he was ordained at Bury according to the Presbyterian mode, by the Rev. John Tilsley of Deane, Rev. Richard Goodwin of Bolton, and other ministers, and commenced his ministrations at Colev Chapel, in the parish of Hali-He married first, Elizabeth, daughter of the Rev. John Angier, and on the 27th June 1667, took for his second wife, Miss Abigail Crompton, of Breightmet, near Bolton. After a long life zealously and profitably spent in religious ministrations he died on May 4th, 1702. — Life of the Rev. Oliver Heywood, by Richard Slate. Mr. Heywood frequently visited Bolton, and conducted the services at the original Nonconformists' chapel at the corner of Meal House Lane. He preached there on the 18th September, 1672, soon after it was opened, and finally in June, 1696, when the congregation were about to remove to their new chapel in Bank Street, he administered the Lord's Supper to about five hundred comof Cheshire, who now represents in the female line the Hacking Hall and Breightmet branch of the family; Dr. S. Hibbert Ware, author of "The History of the Foundations of Christ's College, Chetham's Hospital, and the Free Grammar School, Manchester," and of other works of archæological and historical interest; and Thomas Bateman Esq., an eminent au-

municants. — Diary of the Rev. Oliver Heywood, and The Rise and Progress of Nonconformity in Bolton, by the Rev. Franklin Baker, M.A.

20 (Page 18.) The Rev. Richard Goodwin, M.A. of Emanuel College, Cambridge, was ordained by Bishop Bridgman at Great Lever (probably in the Domestic Chapel, now used as a school-room in connection with the new church of St. Michael, Great Lever), and preached some time at Cockey Chapel. He married there on the 3rd of August, 1641, Sarah, daughter of Mr. James Crompton, of Breightmet, became Vicar of Bolton in 1642, was ejected in 1662, and died in 1685, aged 72. He was interred in the Parish Church of Bolton. Mr. Goodwin is said to have been a good proficient in chemistry. "... He wrote much but printed nothing . . . He was a plain practical preacher, and had an excellent gift in prayer." - Calamy. And Canon Raines' Notes to Notitia Cestriensis, Chetham Society's Publications, vol. xix. p. 14,

thor and antiquary.²¹ Another branch acquired property in Yorkshire; and its representative, whose name was the same as that of our hero, Samuel, was created a baronet in 1838: he however died in 1848 without male issue, when the title became extinct.²²

There are long pedigrees of unquestionable authority existing, which trace the various branches of this family through many generations. Eminent and distinguished men in literature, theology, poetry and jurisprudence have borne the name of Crompton. Among them may be mentioned the Rev. William Crompton of Bedford Lodge near Leigh, Lancashire, rector of Little Kimble, Bucks, and afterwards of Launceston, Cornwall, who died in 1641. He appears to have been a very popular preacher, and published among other works a quaint

²¹ Mr. Bateman has printed a Descriptive Catalogue of his valuable Collection of Antiquities, &c., preserved in his Museum at Lomberdale House, Derbyshire, (1855), and published "Vestiges of the Antiquities of Derbyshire, and the Sepulchral Usages of its Inhabitants." Lond. J. R. Smith, 1848.

²² Vide Burke's Peerage and Baronetage.

sermon, now exceedingly rare, entitled "A Wedding Ring, fitted to the finger of every pair that have or shall meet in the fear of God, or, that Divine Circle of Heavenly Love wherein Man and Wife should walk all their days."²³

Richard Crompton of Bedford Lodge in the parish of Leigh, Esq., barrister-at-law, of Brasenose College, Oxford, and afterwards of the Middle Temple, an eminent member of his profession, was author of:

"L'Office et Aucthority de Iustices de Peace;"24

"A Short Declaration of the end of Traytors and false Conspirators against the State, and of the dutie of Subjects to their Souereign Gouernour;" 25

"L'Authorité et Jurisdiction des Courts de la Maiestie de la Roygne;" 26

"The Mansion of Magnanimitie, wherein is shewed the most high and honourable acts of

²³ 4to, London 1632. For an extract from this curious sermon, see Appendix No. I.

²⁴ London 1583.

²⁵ 4to, London 1587. Dedicated to John (Whitgift) Archbishop of Canterbury.

²⁶ 4to, London 1594. Reprinted 1637.

sundrie English Kings, Princes, Dukes, Earles, Lords, Knights and Gentlemen from time to time performed in Defence of their Princes and Countrie: whereunto is also adjoyned a Collection of divers Lawes and Statutes meete to be knowne of all Men: with a briefe Table, shewing what Munition ought to be kept by all sorts of Her Maiesty's Subjects for the Defence of Her Highnesse Realmes and Dominions."²⁷

Hugh Crompton, one of the successful minor poets of his day, who styled himself "Son of Bacchus and godson of Apollo," published a volume of "Poems, being a Fardle of Fancies, or a Medley of Musick stewed in four ounces of the Oyl of Epigrams;" and "Pierides, or the Muses Mount," with portrait of "Hugo Crompton gen."

²⁷ 4to, London 1599. **Black letter.** Lowndes intimates that "a bookseller in 1825 priced a copy of this rare volume, bound in morocco, at £15 15s." — *Bibliographer's Manual*, vol. i. p. 513.

²⁸ 8vo, London 1657. Inscribed to Col. Thomas Crompton. A copy of this scarce volume brought at Bindley's sale £11 11s.

²⁹ Small 8vo, London 1658. Dedicated to Mary, Duchess of Richmond and Lenox. This volume, con-

The Rev. Thomas Crompton M.A. of Oxford, "born at Great Leaver," minister of Toxteth Park Chapel, Liverpool, "a man of excellent abilities and good elocution," died at Manchester September 2nd, 1699, aged sixty-four.³⁰

The Rev. William Crompton M.A., ejected from the vicarage of Columpton, the author of seven volumes of controversial divinity, died in 1696.³¹

The Rev. John Crompton, minister of Cockey Chapel, "a man of great worth and great humility," died in 1703.³²

The Rev. Thomas Crompton of Oxford, incumbent "of Ashby [? Astley Chapel] in the parish of Leigh," was reputed to be "a great scholar, well acquainted with the Fathers, particularly Austin; a man of universal charity, a truly Catholic Christian, of an exact inoffensive conduct, and a rare example of self-denial and mortification with respect to worldly profits and

taining only 150 pages, has been sold for the high price of £12 15s. (Lowndes.) For one of the shorter poems in this work, vide Appendix No. II.

³² Ibid. vol. ii. p. 381. "Cockey," now Ainsworth, near Bolton.

honours." This good man died in 1691, being eighty-two years of age.³³

The Rev. John Crompton M.A. of Cambridge, "born of religious parents at Breightmet, a hamlet in the parish of Bolton, Lancashire," was "lecturer of All Hallowes, Derby," and much beloved by the inhabitants of that town. from "continuing to perform all the duties of his office during the time of a raging pestilence, by which the town was so desolate that grass grew up in the Market place. Yet he himself was preserved from the infection, which he attributed to the blessing of God upon a plaister applied to his stomach, sent him by an able physician. He died in January, 1699. worthy christian remarked of him 'that he was always cheerful though on the losing side.' Mr. Samuel Crompton, one of his sons, was pastor of a dissenting congregation at Doncaster." 34

Three different gentlemen of the name attained great eminence in the legal profession, and were each rewarded for their honesty and ability by seats on the judicial bench.

Many clergymen of this name were ejected from their churches at the Restoration, some of whom suffered very severe deprivations, and the name is also conspicuous in the list of non-conforming laymen resident in and about Bolton at the same period.

It is not a little remarkable that so many of the Cromptons should have been at that time in possession of considerable estates in the neighbourhood. The following names occur in the list of the founders of non-conformity in Bolton:

——— Crompton, of Crompton Fold. Thomas Crompton, of Brightmet. William Crompton, of Darcy Lever. James Crompton, of Brightmet. Abraham Crompton, of Brightmet. Laurence Crompton. Joseph Crompton, of Haugh. Nathaniel Crompton, of Bolton.³⁵

³⁵ Rise and Progress of Nonconformity in Bolton, by the Rev. Franklin Baker, M.A., note, p. 96.

CHAPTER III.

Firwood. King and Queen oaks. Lower Wood. Removal to Hall-in-thc-Wood. Death of George Crompton. His exertions for the building of the Chapel-in-the-Fields. Mrs. Crompton. Her Industry and care for her Son's education. Samuel commences to weave. Practises music. Uncle Alexander Crompton. Samuel spins on Hargreaves's jenny, but is plagued with bad yarn.

The parents of Samuel Crompton resided at Firwood, in the township of Tonge, near Bolton, occupying a farm, and, as was the custom of that time, employing their leisure hours in carding, spinning and weaving. This estate had been for many generations the property of the family, but some time previous to the birth of Samuel Crompton's father it was mortgaged to the Starkies and eventually sold to that family, the Cromptons remaining upon it as tenants.

The property was famous in those days for an abundance of fine timber, and particularly for two remarkably old oak trees, called the King and Queen oaks, which were so large as to require the outstretched arms of three men to

reach round the trunk of each. These trees dwelt pleasantly in the memory of Samuel Crompton, who often spoke of them in after life. Here our hero was born on the 3rd of December, 1753. Soon after his birth the family removed to a cottage near Lower Wood in the same township, and afterwards, when the child was five years old, to a portion of the neighbouring ancient mansion called Hallin-the-Wood. Almost immediately after this last removal the father died. His son had in after life but a faint recollection of him, but remembered to have looked at him in his open coffin, and to have been struck with what appeared to him the extreme length and thinness of his father's nose.36

³⁶ From the oral communication of the late Mr. George Crompton, eldest son of Samuel Crompton. The author is indebted to this gentleman for many valuable reminiscences of his father. Mr. George Crompton anticipated the publication of this volume with much pleasing interest. It is greatly to be regretted that he has not been spared to read and improve it by his criticisms. He departed this life on the 11th of June, 1858, at his residence in Blackburn, where he had been settled for many previous years, respected and mourned by a large circle of friends.

George Crompton, the father of our hero, died at the comparatively early age of thirty-He and his wife, Elizabeth (better known as Betty) Holt of Turton, were strictly religious people, and regularly attended the public services at the Chapel-in-the-Fields.37 Mr. Crompton took much interest in the erection of that building; indeed his early death was by his family attributed to over exertions which he made in personally assisting to erect the organ gallery of the church after his usual day's work. He was mainly instrumental in collecting subscriptions for the organ, and helped to make the pews in the gallery, the rents of which were intended for the organist's salary. He was enthusiastically fond of music, and at the time of his death had commenced making an organ, leaving behind him some tools and many oak pipes from one to two feet in length in one of the dark rooms of the Hall-in-the-Wood. These were sometimes allowed to be used as playthings for his son and grandchildren; but his widow always

³⁷ Now better known as All Saints' Church, Little Bolton.

carefully packed them away in their old hiding place whenever the children became tired of them.

The mother of Samuel Crompton was a prudent and virtuous woman. On that point all who knew her were agreed; but she was something more than that. Energetic in her actions and somewhat austere in her manner, those who did not know the innate goodness of her heart were apt to think her self-willed and imperative. Perhaps when old age crept upon her there was some truth in this; but no mother could have been kinder to an only son, no widow could have clung more fondly to her infant orphan, than did good Betty Crompton to her boy Samuel.38 The best energies of her active mind and body were devoted to the cares of her family; for them she continued the somewhat masculine labour of farming, and for them employed every leisure hour in the less laborious occupations of carding, spinning and weaving. That she was herself a woman of somewhat superior attainments is shown by the fact of her appointment

³⁸ Besides Samuel, she had one daughter in her husband's lifetime, and another shortly after his death.

as overseer of the poor for her township, an office very rarely filled by a female. She took care that all available means of education should be extended to her son, who at first attended the school of a Mr. Lever in Church-street, Bolton, but was very early put under a then well known and celebrated master called William Barlow, who kept school at the top of Little Bolton, and had considerable reputation as a teacher, particularly of writing, arithmetic, book-keeping, geometry, mensuration and mathematics, -- so much so indeed that he used to be called "a witch in figures." To the instructions of this teacher Crompton was indebted for the remarkably neat hand which he always wrote; and he also, in all probability, encouraged the boy to pursue those particular studies which appear to have had peculiar interest for both teacher and pupil. There is no information that little Samuel ever attended the excellent Grammar School of Bolton, or that he received other education than that which Mr. Barlow could supply; but it is quite certain he was well educated for the position in life that he was likely to occupy. It is however most

probable that the exigencies of his mother's position would compel her to take advantage of his assistance in her lighter labours at the earliest possible period, and that his little legs became accustomed to the loom almost as soon as they were long enough to touch the treadles.

Mrs. Crompton with her son and two daughters continued to be regular attendants at All Saints' Church, and many a pleasant Sunday walk they must have had through the green fields and past the spot where the then clear and pellucid brooks from Eagley and Smithells Deane united themselves at "the meetings." Mrs. Crompton had acquired local celebrity for her home-made elderberry wine, the fruit being gathered from the bushes that then grew plentifully about the Hall-in-the-Wood. This beverage she hospitably dispensed to her friends and visitors, of whom she had a great number both among the connexions of her late husband and her own personal acquaintances; for all accounts agree in showing that Widow Crompton was not only an influential but a very popular person in her sphere of life. The butter which she sent to market always obtained ready sale

and a top price; and every year she gathered a little harvest of honey from those humble but industrious servants the bees, which she kept in the old fashioned garden. She practised to the very letter the injunctions of Scripture, putting on some of them a rather forced interpretation; thus, her son would say in after life that she occasionally beat him when a boy, not for any fault but because "she so loved him." For this he often said (with a smile) that "he could scarcely forgive her."

We have but little authentic information respecting the early youth of Samuel Crompton prior to the year 1769. He was then sixteen years of age and continued to reside with his mother, occupied at the loom, and attending an evening school at Bolton where he advanced his knowledge of algebra, mathematics and trigonometry. For the six years previous to that date there had been a greatly increased demand for all kinds of cotton goods, and in particular for imitations of the fine and thin muslins imported from India, which had become very fashionable for ladies' wear. Many attempts were made by the manufacturers in Lancashire

and Scotland to produce similar fabrics, but without success. The hand-spun yarn of this country could not compete with the delicate filaments produced by Hindoo fingers. Still the demand for fine cottons of various kinds was so considerable that the weavers, for the sake of high wages, were stimulated to make great exertions; these however were perpetually impeded by the scarcity of yarn for weft, which often kept them idle for half their time, or compelled them to collect it from the cottagers in such small quantities as single, or even half, ounces. Another important cause had contributed to this scarcity. The invention of the fly-shuttle by Kay of Bury³⁹ had,

³⁹ "In the year 1738 Mr. John Kay, a native of Bury, but then living at Colchester, suggested a mode of throwing the shuttle, which enabled the weaver to make nearly twice as much cloth as he could before. By the old plan the shuttle was thrown by hand, while by the new arrangement it was impelled by a simple contrivance of two strings attached to the picking (or throwing) peg which the weaver held in his hand."—Baines's History of the Cotton Trade, p. 117. "Mr. Kay brought this ingenious invention to his native town, and introduced it among the woollen weavers in the same

by doubling the speed of the weavers' operations, destroyed the arrangement which up to that time existed between the quantity of yarn spun and the weavers' demand for it. This natural balance the fly-shuttle suddenly disturbed, and, notwithstanding the great efforts of others, it was not again adjusted until after Crompton's invention was in full operation.

Such was the weavers' state of starvation for yarn when in 1767 Hargreaves⁴⁰ invented the

year, but it was not much used among the cotton weavers until 1760. In that year Mr. Robert Kay of Bury, son of Mr. John Kay, invented the *drop-box*, by means of which the weaver can at pleasure use any one of three shuttles, each containing a different coloured weft, without the trouble of taking them from and replacing them in the lathe."—Guest's History of the Cotton Manufacture, p. 8. "John Kay of Bury, the inventor of the fly-shuttle, was another persecuted worthy. He was mobbed out of the country, and died in obscurity in a foreign land."—Letter to the author from Samuel Bamford, author of The Life of a Radical, dated 23rd of March, 1859.

⁴⁰ James Hargreaves, a weaver, of Stand-hill near Blackburn, invented the jenny in 1767. He, like Kay the inventor of the fly-shuttle, was driven from his native county by the ignorant prejudices of his fellow

jenny. And two years afterwards, when only sixteen years of age, Samuel Crompton spun on one of these machines, with eight spindles, the yarn which he afterwards wove into quilting; and thus was he occupied for the following five years.

We do not suppose that at this time our hero had much opportunity for reading; but there can be little doubt that at his solitary loom in the old mansion he had abundant time for, and in truth acquired then, the habit of thinking—a habit much less common and much more valuable than is usually imagined. Nor can we learn that he had any companions at his labour,

workmen. The circumstances of his invention, with its effects upon the cotton manufacture of Lancashire, and the events of his life, are described with graphic effect in the pages of a novel entitled *The Vicissitudes of Commerce*, a Tale of the Cotton Trade, Saunders and Otley, London 1852; republished in 1854 by E. Howell, Liverpool, under the title of Lancashire Life, or the Vicissitudes of Commerce. The author, (Thomas Greenhalgh Esq.) a gentleman born in Bolton and resident in its neighbourhood, is eminently qualified by his antecedent avocations to write on the subject with power and authority.

or that he associated with young people of his own age. His mother, though always kind, was strict in discipline and kept him close to his work, insisting on a certain length being woven daily. Under these circumstances it was natural that Samuel Crompton should become somewhat prematurely a thinker, and it was not less so that his want of social intercourse produced a shyness of manner which adhered to him through life. Debarred from company, and accustomed to solitude, he now began to have a taste for music; and in consequence of this was led to the first trial of his mechanical skill in making a violin, which he commenced learning to play upon. He soon scraped a very intimate acquaintance with his fiddle, which became to him truly a bosom friend, proving in after life the solace of many a solitary hour and a source of consolation after many a bitter disappointment. With this musical friend he on winter nights practised the homely tunes of the time by the dim light of his mother's kitchen fire or thrifty lamp; and in many a summer twilight he wandered contemplatively among the green lanes or by the margin of the pleasant brook that swept round her romantic old residence.

There was then living at the Hall-in-the-Wood, forming indeed one of its family, a relative, whose peculiarities could scarcely fail to have an important influence in forming the mind of the young philosopher. His uncle, Alexander Crompton, was so much afflicted with lameness that he was unable to leave the room in which he slept and worked. There was literally but one step between his bed and his loom. On this he worked assiduously, selling the fustians he had himself woven, after having them dyed and finished: by these means he acquired some property, and his quiet and orderly life caused him to be both pitied and respected. Uncle Alexander was a man, like the rest of the family, of strict, almost of austere, piety. He could not attend the usual ordinances of religion: all that he could do however he did, and that in a manner so humble, so respectful and so original, that, though wandering somewhat from the proper subject of our story, we venture to narrate it.

On each succeeding Sunday, when all the

rest of the family had gone to morning service at All Saints' Chapel, Uncle Alexander sat in his solitary room listening for the first sound of the bells of Bolton Parish Church. Before they ceased ringing, he took off his ordinary working day coat and put on that which was reserved for Sundays. This done, he slowly read to himself the whole of the Morning Service and a sermon, concluding about the same time that the dismissal bells commenced ringing, when his Sunday coat was carefully put aside,—to be resumed again however when the bells took up their burthen for the evening service, which he read through with the same solitary solemnity. One cannot help respecting the character of this simple but sincerely pious recluse, who thus, cut off from the world, worshipped his God and at the same time honoured himself. Doubtless his nephew remembered and respected this example through life.

There were many other circumstances occurring in those years when Crompton was passing from youth to manhood that would operate on his sensitive mind, and gradually lead it into the track which prepared him first to *think* of

and ultimately to achieve his valuable discovery. The genius of the great Duke of Bridgewater⁴¹ and his wonderful engineer, Brindley,⁴² proved that the greatest physical difficulties might be conquered by patient and persevering energy.

We cannot doubt that if the youthful Samuel Crompton had one single free holiday in those his years of adolescence, he spent that holiday in an examination of the wonders of Worsley,⁴³ and strengthened himself for his own future task by the great example he there beheld. He did not see, but it is more than probable that he heard, much of that marvellous *fire engine* which was year after year passing like himself

⁴¹ Francis Egerton, third and last Duke of Bridgewater, left, it has been well said, his biography engraved in intaglio on the face of the country he helped to civilize and enrich. He was born in 1736 (the birth-year of James Watt) and died in 1803. — *Imperial Dictionary of Universal Biography*, vol. i. p. 748.

⁴² James Brindley, a celebrated engineer, who shares with the Duke of Bridgewater the honour of founding the system of canals in England, was born in 1716 and died in 1772. — Imperial Dictionary of Universal Biography, vol. i. p. 751.

⁴³ Worsley is distant about seven miles from Bolton.

from youth to giant manhood under the nursing of James Watt. The scientific discoveries of Priestley and Black⁴⁴ reached him probably in faint whispers only, but they were whispers to which his acute ear would be ardently opened. He was master of the invention of the unfortunate and ill-used Hargreaves, upon whose spinning-jenny he manipulated with the skill acquired by six years' experience. Arkwright, whose reputation as an inventor now rung through Lancashire, was personally known to him, and had in all probability often exercised his tonsorial skill upon his head when practising as a barber in Deansgate.⁴⁵

This Bolton barber, without previous experi-

⁴⁴ In after life he was conversant with the writings of these philosophers, but complained of the difficulties he met with in their scientific nomenclature. — Information from his grandson to the author.

⁴⁵ Two shops are mentioned as having been occupied by Arkwright when he lived in Bolton: one in the passage leading to the old Millstone Inn, Deansgate; the other a small shop in Churchgate. The lead cistern in which his customers washed after being shaved is still in existence and in the possession of Mr. Peter Skelton of Bolton.

ence as a spinner, was now in 1771 (Crompton being then eighteen years of age) building his famous mill at Cromford in Derbyshire, and already rapidly obtaining the reputation of great wealth, while Samuel was passing half his working hours in piecing up the broken ends of the bad yarn which prevented him from making satisfactory progress with his daily stint of weaving; for, as we have already mentioned, his mother insisted upon a certain amount of work being finished every day. A failure inevitably subjected him to her somewhat sharp vituperation; and if he succeeded in his allotted task it was at the expense of so much time lost in mending the ever-breaking ends of his miserable yarn that none remained for his darling fiddle or for the few books he now desired to study.46

⁴⁶ Books were at that time scarce and dear in Bolton, and could not be procured except by purchase. Samuel Crompton's library must have been very limited in comparison with that which is at the command of any and every working man of the present time in or near Bolton. Upwards of five thousand volumes are circulated in their families, and above twelve thousand more may be read

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in the Public Free Library without charge or impediment of any kind. Among these are included "all patents for inventions connected with Science, Arts, Mechanics and Manufactures which have been granted in this kingdom since 1617, with the inventors' drawings and a detailed account of the specifications, mode of construction, and the uses to which the patents are intended to be applied." The Mechanics' Institution offers the use of five thousand volumes to be read at the homes of the members. with abundant periodicals and newspapers in the Reading-room, for the small payment of 2s. 6d. a quarter. Every working man should greatly and gratefully appreciate these invaluable privileges.

CHAPTER IV.

The Hall-in-the-Wood. Its Age and Architecture. Beautiful Prospect. Fine Timber cut down. Rookery. Samuel Crompton commences his Mechanical Labours. Visits of a reputed Ghost. Tools and Violiu.

The Hall-in-the-Wood is situated about a mile from Bolton, and stands on an elevated piece of rocky ground round which sweeps the Eagley brook or river, for at this point it has acquired considerable width from the number of small threads of rivulets and springs poured into it from the neighbouring hills. Remains of many old trees cut down to their roots, and a very few specimens of fine timber still standing, show that the name of the mansion was at one time entirely appropriate.

The building is of considerable size, and was erected at two different periods: one portion—the materials being oak timber fancifully arranged, with the interstices filled up with plaster, in the style usually denominated "post and plaster" work — may be as old as the end of

the fifteenth century; while a considerable part of the south front and the porch are built of stone. The latter bears the date "1648," with the initials "A. A. N." This portion was erected by Alexander Norris, whose daughter Alice married in 1654 John Starkie of Huntroyde Esq., in whose descendants the property is now vested.⁴⁷

The interior of the Hall is highly interesting, as the rooms have escaped any attempt at modern improvements: those on the ground-floor are spacious and lofty, particularly the kitchen and dining-room. Unfortunately the obnoxious window tax, now happily repealed, caused many of the windows which were large and numer-

⁴⁷ Burke's Landed Gentry and Canon Raines's Notes to the Notitia Cestriensis of Bishop Gastrell, Chetham Society's Publications, vol. xix. p. 12. Canon Raines states the name of the heiress to have been Margaret. Burke calls her Alice, which is probably correct, as I find among the MSS. of the late Mr. John Albinson of Bolton a copy of an "Abstract of agreement for settling disputes in Tonge Moor between Alice Starkie of Hallin-the-Wood, widow, and others," dated 1673. "Norris, of Hall-in-the-Wood, attended the Parish Church of Bolton in 1620."—Brown's History of Bolton, p. 329.

ous to be built up with lath and plaster, and the rooms not at present in actual use are consequently unpleasantly dark. The dining-hall and the room in which Crompton worked, now occupied as a bed-room — in which there is a plaster enrichment of the Norris arms — retain their original ample and handsome windows in small leaded quarries. The second story is approached by a quaint and picturesque staircase with balustres of black oak; but the rooms here are deprived of at least one half of their original window light. The third story, all but entirely dark, is subdivided into numerous small rooms and corridors so mysteriously intricate, and furnished with so many narrow stairs, passages and secret hiding-places, that it becomes a scene of perfect bewilderment to the visitor who ventures himself among its curious mazes.48

⁴⁸ During a recent investigation of the dark attics of the Hall-in-the-Wood, the author met with much of the old glass removed from the windows when they were built up to avoid payment of Pitt's window tax. Though much dilapidated, the patterns of the lead-work, into which singularly small pieces of glass were set,

Though it must be confessed that the hand of time now weighs heavily on the structure of the Hall-in-the-Wood, that perhaps only increases its picturesque appearance, and has made it a favourite subject for the artist. The mansion has been so often painted and engraved that its appearance is familiar to many who never saw it in its reality. An admirable picture, embracing much of the surrounding scenery, was painted some thirty years since by Linton, by commission from the late Benjamin

were for the most part more elaborately beautiful than he has elsewhere met with.

⁴⁹ Linton's picture was taken from a point of view in the neighbouring estate of Henry Ashworth Esq., called the Oaks, a name which, taken in connexion with Fir-Wood, Lower-Wood and Hall-in-the-Wood, all immediately adjacent, proves that the district was densely enriched with timber trees. The spot was selected when the artist paid a visit to Mr. Ashworth in company with the late Benjamin Hick Esq., the late Benjamin Dobson Esq., and the late Mr. Liversege, an artist well known and very popular in Lancashire at that time. When the picture was exhibited in London, Linton was laughed at by his professional friends, who chose to insist that there could be no such scene found in Lancashire, nor any trees so large as those he had introduced.

Hick Esq. of Bolton; and more recently a large painting of the old house has been executed by Selim Rothwell Esq.⁵⁰ a Bolton artist, now settled in Manchester, and has found a fitting place in the collection of Richard Norris Esq. of Liverpool, a descendant of the family originally, or at least for a long time, owners of and residents at the Hall-in-the-Wood; and an excellent engraving of the picturesque old mansion is also given in Mr. S. C. Hall's "Ancient Baronial Halls of England," All of these pic-

— Information from Henry Ashworth Esq. This painting has been engraved for one of the early "Annuals," and as an illustration to Baines's History of the Cotton Manufacture.

⁵⁰ A very beautiful tinted lithograph was last year published from this painting by Mr. Selim Rothwell. It is a pleasing and accurate representation of the house as it now is, and should have a place upon the walls of all who respect the memory of Crompton. Mr. Norris courteously permitted the original painting to be removed from Liverpool for the inspection of the members of the Bolton Mechanics' Institution, when the author read his first Paper on "The Life and Times of Samuel Crompton."

⁵¹ The accomplished author of this valuable book liberally presented a copy, with proof impressions of the prints, to the Bolton Free Public Library.

tures however, beautiful as they are, represent this fine old mansion as it is, or after it had acquired celebrity from being the residence of Crompton, who has made it his own (and, alas! his only) monument.⁵²

At the present time the very success which has attended his invention has covered the landscape with an almost perpetual veil of coalsmoke and polluted the clear river with dark stains of dye-woods. Thus one of the most lovely scenes in Lancashire is now rarely to be seen except through a dense and murky atmosphere. How grand that landscape must have looked a hundred years ago, when the wooded valley was steeped in the splendour of a bright sunset, can scarcely be imagined! But even now, on a clear Sunday evening in summer or autumn, the prospect is full of sensuous beauty,

⁵² So long as it exists, the Hall-in-the-Wood must be the best and most appropriate memorial of Samuel Crompton. But it should not be forgotten that the building may soon be swept away; it cannot very long resist the sure advance of natural decay, and it is every day exposed to casualties which may at any time, and probably suddenly, lead to its destruction.





HALLI, TTHE WOOD, NEAR BOLTON, Where Sammed Crompton invested Mule Spinning.

and is especially interesting to a person of a reflective mind, enabled to superadd to the charms of Nature (ever a joy in themselves) the further knowledge that the spot on which he stands and the landscape over which he looks comprise the field on which has been fought that great battle of *Invention* and of *Industry* which, more than any or all the boasted sanguinary conflicts of military science or brute force, has contributed to the present lofty supremacy of Great Britain among the nations of the world, and proved the truth of the Poet's axiom, that

"Peace has her victories as well as War."

The Hall-in-the-Wood lost however a great charm, and almost its right to the name, during the time Crompton resided there. The magnificent oak and beech trees with which it was then densely surrounded were cut down; and he always looked back to their removal with feelings of sorrow and regret. He used to tell his sons that the oak trees were so thick that no cross-cut saw could be procured in Bolton long enough to cut them down, and that the woodmen were obliged first to cut deep

slabs out of each side to enable them to saw down the trees. He remarked also that people came from a distance to burn the croppings of the trees to make alkali, and that a large colony of rooks which had long resided there lost their lodgings by these proceedings. It is however most probable that the rooks did not emigrate to any great distance, and that the same family (through many intervening generations) may still be found in the fine trees which surround the neighbouring mansion of Sharples Hall.⁵³ The thick timber about the Hall-in-the-Wood is remembered by parties still living in Bolton,⁵⁴ all of whom speak of the trees as magnificently large.

⁵³ The property and one of the country residences of R. R. Rothwell Esq.

⁵⁴ Our intimate and esteemed townsman (Mr. Scowcroft) perfectly recollects going when a child to see the trunks of the trees hauled out by three or four horses; and his father, then resident at Bradshaw, with the father of the late Mr. Ainsworth, were the principal purchasers of the felled timber. John Moore Esq. caused some of the roots of these gigantic trees to be removed to his residence, Hill Cot, in the immediate neighbourhood (now occupied by Lewis Murton Esq.)

It was in the year 1774, Samuel Crompton being then only twenty-one years of age, that he commenced the construction of the Spinning Machine which was ultimately called the "Mule," but which for many years was known by the name of the "Hall-i'-th'-Wood Wheels;" and it took him five entire years to bring his improvement to maturity. During this time he worked alone, having no companion in his labours, and, so far as we can learn, no one in his confidence to whom he could look for sympathy or assistance. His own account of this period of his life is thus briefly stated: - "The next five years had this addition added to my labour as a weaver, occasioned by the imperfect state of cotton spinning, viz. a continual endeavour to realize a more perfect principle of spinning; and though often baffled I as often renewed the attempt, and at length succeeded to my utmost desire at the expense of every shilling I had in the world."55 It must be clearly seen that the

where they are placed among the ornamental shrubbery on the lawn.

⁵⁵ Extract from a manuscript document circulated by Mr. Crompton about the year 1810, printed in "The

labour he bestowed, and the time he spent in seeking after this desired improvement, was an addition to his regular every-day work; and in his enthusiasm he did not scruple to deprive himself of many of the usual hours of rest. Indeed this it was which first called the attention of his family and neighbours to his proceedings. Strange and unaccountable sounds were heard in the old Hall at most untimely hours; lights were seen in unusual places; and a rumour became current that the place was haunted. Samuel was however soon discovered to be himself the imbodied spirit (of invention) which had caused much fear and trouble to his family; even when relieved from the alarm of a ghost, they yet found that they had among them a conjuror! 56 for such was the term ap-

Basis of Mr. Samuel Crompton's Claims to a second remuneration for his discovery of the Mule Spinning Machine." p. 21.

⁵⁶ The important discoveries and inventions of that time, particularly in chemistry as applied to bleaching, and the adaptation of improved machinery for carding and spinning cotton, induced many ingenious but illeducated men to neglect their regular labour in pursuit of sudden fortunes by similar means. They were for

plied in contempt to inventors in those days, and indeed for a long time afterwards.

But Samuel Crompton was no conjuror, looking far and wide for a happy hit or a chance combination; on the contrary, his invention appears to have been the result of pure inductive philosophy, followed out step by step with a mathematical precision for which his mind had been duly prepared by previous education. He must from the first have seen very clearly the object he aimed at, but he had great difficulties to encounter before that object could be attained. Though possessed of the tools which his father had procured to aid him in his attempt at organ-building, and which his mother had affectionately and carefully preserved, they were far from sufficient for young Samuel's present purpose, while he laboured under the additional disadvantage of inexperience and consequent inability to use them to the best advantage; but by devoting every shilling he could spare to the purchase of such tools as

the most part unsuccessful, and many ruined themselves in these attempts. To such men the title of "conjuror" was freely applied by their friends and fellow workmen. were absolutely requisite, and by an unremitting and persevering use of them, aided by his clasp knife to which he is said to have been greatly indebted, he at length triumphantly conquered the obstacles that for nearly five years impeded his efforts, but which one by one he succeeded in clearing from his path. Probably from a desire to cultivate concerted music, of which he was fond to enthusiasm, as well as for the sake of the small emolument he received for his services, he and his violin were frequently employed in the orchestra of the Bolton Theatre during the season for performance. The payment he received was only one shilling and sixpence each night; but, small as it was, that payment greatly assisted him in procuring the tools which he required for his mechanical operations.

CHAPTER V.

Previous Inventions for Spinning. Louis Paul's Patent claimed for Wyatt by Baines. Reclaimed for Paul by Cole. Highs's Attempts to spin by Rollers. Arkwright's discovery and appropriation of the Plan. His Success, and foundation of the Factory System. Hargreaves invents the Jenny, and Crompton spins on one of these Machines. Commences Experiments for his own Invention. Description of Crompton's first Machine by the late Mr. Kennedy.

In order to keep up the necessary connexion of our narrative we will very briefly mention the dates and the authors of previous inventions of machines for cotton spinning, and show how far they differed from that of Samuel Crompton.

Until the year 1737 or 1738 all the cottonyarn used in this or in any other country was spun in single threads by the hand. In 1738 Kay of Bury invented the fly-shuttle; and in the same year by a curious and interesting coincidence, and so far as can be learned without any reference to the recent improvement in weaving, a patent was obtained by Louis Paul

for spinning wool and cotton by passing previously prepared slivers between pairs of rollers turned with different degrees of velocity. A copy of this patent may be seen at full length in Baines's "History of the Cotton Trade."57 That author proceeds with an elaborate argument to show that John Wyatt and not Louis Paul was the inventor of spinning by rollers. Into this argument it is unnecessary to enter, but it may be stated that it resulted in establishing the opinion that Paul obtained the patent either surreptitiously or by some collusive arrangement with the real inventor, Wyatt.58 This opinion remained undisturbed until September 1858, when Robert Cole Esq. F.S.A. read to the British Association at the Leeds meeting a communication entitled "Some account of Louis Paul and his invention of the Machine for Spinning Cotton and Wool by Rollers, and his claim to such invention to the exclusion of John Wyatt;" proving very satisfactorily that Louis Paul was the original in-

⁵⁷ Page 122.

⁵⁸ Vide Baines's History of the Cotton Manufacture, pp. 121-140.

ventor of the method of spinning by rollers, and that John Wyatt, whose family have claimed the credit of the invention for him (he never appears to have made any such claim himself), had really little or nothing to do with the invention, though he certainly had a pecuniary interest in working it.⁵⁰

The invention, though wonderfully ingenious, and though it was supported by some of the distinguished men of the time, including the projector and editor of the "Gentleman's Magazine" and Dr. James inventor of the Fever Powder, languished and died. Paul boasted that he had realized £20,000 by his invention, but this must have been a very exaggerated statement.

It next appears that a person called Highs, or Hays, a reed-maker at Leigh, took up the plan of attempting to spin by rollers in 1767. He made experiments for this purpose, and em-

⁵⁹ By the kind permission of Robert Cole Esq. F.S.A. we are permitted to print this interesting Paper in extenso, as it could not be abridged without materially injuring the force of the very conclusive argument. See Appendix No. III.

ployed one Kay a clockmaker to assist him. It does not appear however that they (at least at that time) achieved any success, or so far completed any machine as to set it to work; but there can be little doubt that they experimented on the roller process. Whether Highs had any previous knowledge of Paul's patent we cannot ascertain, though such was probably the case. 60

Richard Arkwright was at this time a barber and peruke-maker in Bolton. He was a man of singular energy and great talent, though in no way distinguished as an inventor or mechanic. It was his custom to travel through

60 Guest's "Compendious History of the Cotton Manufacture, with a disproval of the claim of Sir Richard Arkwright to the invention of its ingenious Machinery," Manchester 1823. It is the purpose of this volume, which however contains much valuable information on the state of the cotton trade at the time of its publication, to show that Highs was the original inventor not only of spinning by rollers but also of the jenny-machine, more justly attributed to Hargreaves. Samuel Crompton's invention, which had at this period all but supplanted both of these previous systems, is but slightly noticed.

the neighbouring counties in prosecution of his business, and in particular to attend the fairs at which country people and girls congregated, to purchase from the latter their long hair then much in demand for fashionable perukes, in which negotiations he is said to have been wonderfully expert. In one of these journeys, Arkwright appears to have formed the acquaintance of Kay the clockmaker, now removed to Warrington, and from him learned the attempts which were then being made by Highs.⁶¹ There is no reason to suppose that Arkwright had previously directed his attention to the subject of cotton machinery, but his active mind immediately grasped with prophetic accuracy the mighty results which would accrue from such an invention, and he threw himself into the speculation with the energy and stubborn perseverance that distinguished him through life. Neither poverty nor want of mechanical skill was permitted to hinder him; he fought the battle bravely, established the system of spinning by rollers, and calling in the aid of water to move his machinery

⁶¹ Baines's History of the Cotton Manufacture, p. 149.

ultimately perfected that kind of yarn which is now and has long been known as water twist or throstle yarn; and at the same time laid the foundation of the system of factory labour which has since developed itself into a national institution as wonderful as it is important.

But this was not all. Arkwright adopted the inventions and improvements in the preparatory processes which were now being made by many poor practical men who could not protect their right by patents in consequence of the enormous expense attending them. These he combined, altered and improved. He was not scrupulous in appropriating them to his own use; and succeeded in securing their exclusive advantages by patents which he had abundant capital to procure. His processes of carding and roving, though far inferior to those now practised, were a great advance upon the handcards or the stocks used at that time by all who were not licensed under his patents. time, in that same year 1767 (though some say in 1764) when Highs and Kay were making experiments with rollers and Arkwright adopted their plans, James Hargreaves, a weaver near

Blackburn, stimulated by the famine for yarn which the fly-shuttle had now occasioned, invented a modification of the ordinary one-handed wheel by which he was enabled to spin sixteen threads at the same time "by a turn or motion of one hand and a draw of the other," ⁶² as he himself says in the specification for his patent which he obtained in 1770, having established himself in Nottingham to avoid the persecutions, and even attempts upon his life, caused by the popular ignorance and selfishness which then opposed all mechanical improvements.

We have seen that Samuel Crompton spun upon one of Hargreaves's jennies⁶³ when he was only sixteen years of age, and he continued to use it, doubtless in a greatly enlarged and improved form, for six or eight years. It was an admirable and ingenious machine for increasing the quantity of work; but, unlike Arkwright's water-frame, the yarn spun upon it was soft and did not possess the requisite firmness and

⁶² Baines's History of the Cotton Manufacture, p. 159.

 $^{^{63}}$ Brief Memoir of Samuel Crompton, by John Kennedy Esq.

tenuity for warps: nor was it adapted for the delicate muslins (now in great demand for ladies' dresses) which had been woven in Bolton⁶⁴ for the previous three years, but either from hand-spun material or from the fine yarn occasionally imported from the East Indies.

Such was the position of the art of Cotton Spinning when in 1774 Samuel Crompton commenced the experiments which eventuated in the invention of the Mule. Of his progressive steps before completing it we can give little information. The machine was constructed for the most part of wood by the aid of the scanty supply of tools which has been already mentioned. It is known however that he frequently visited a small way-side smithy in the township, where we are informed he "used to file his bits of things."

The companions of Samuel Crompton's early days have all long since passed away, and no one now remains to whom we can apply for a description of the mule or *new wheel* as it was called when first invented; but happily a record

 $^{^{64}}$ Muslins and cotton quiltings were first made in 1763 by Joseph Shaw of Bolton.

of it has been left by the late John Kennedy Esq. of Manchester, a very estimable gentleman, who was ever a dear and kind friend to Crompton; and from his skill and experience in cotton machinery and his perfectly upright and truthful character he was of all others the man whose opinion may be relied upon with the most perfect confidence. In a Paper which this gentleman read before the Literary and Philosophical Society of Manchester in 1830, entitled "A brief account of Samuel Crompton, with a description of his machine called the Mule," 65 he

65 Mr. Kennedy printed his Paper upon "Crompton," and five other interesting Essays, some of which he had read before the Literary and Philosophical Society of Manchester, in a small volume "for private circulation only," dedicated to his "children and friends." It is necessarily very scarce, and all who are fortunate enough to possess a copy value it highly. Mr. Kennedy departed this life on the 30th of October, 1855. His character and the principal events of his long life are truthfully and comprehensively described in the following obituary notice from the *Manchester Guardian* of November 1st, 1855:—

"We yesterday recorded the death of the late John Kennedy Esq., whose memory calls for somewhat more than the usual brief obituary notice, being so intimately informs us that "Crompton's machine was called the *Hall-in-the-Wood Wheel*, or Muslin Wheel,

and prominently connected as he was with the history of the cotton manufacture of this district, and forming one of the last remaining links connecting the practical mechanists of a former day, such as Watt and Crompton, with the Fairbairns and Nasmyths of the present time, to and by all of whom he was well known and highly esteemed. Mr. John Kennedy was born at Knocknalling, in the stewartry of Kircudbright, on the 4th of July, 1769, the year which gave birth to so many eminent men, and he had consequently completed the eightysixth year of his age. He left Scotland at the early age of fifteen, and came to Chowbent, where, under the care of an old and valued friend, he acquired a practical knowledge of the machinery then used in the spinning and manufacture of cotton. In the year 1791 he came to Manchester, where, in partnership with the late Mr. James M'Connel, he commenced and successfully earried on business as machine-maker and cotton spinner. retired from active business in 1827, but continued down to his death to feel a very lively interest in every topic connected with the progress of the cotton manufacture, and of mechanical inventions generally, with respect to which very few other men possessed so extensive and accurate a knowledge. It is, perhaps, worthy of remark that Mr. Kennedy was one of four young men, all from the same immediate neighbourhood, and of nearly the same age, who all settled in Manchester, and all became

because its capabilities rendered it available for yarn for making muslins; and finally it got the name of the *Mule*, from its partaking of the two leading features of Mr. Arkwright's machine and Hargreaves's spinning-jenny. Mr. Crompton's first suggestion was to introduce a single pair of rollers, viz. a top and a bottom, which he expected would elongate the rove by pressure like the process by which metals are drawn out, and which he observed in the wire-

eminent as cotton spinners; the other three being his brother Mr. James Kennedy, his partner Mr. James M'Connel, and Mr. Adam Murray. By all Mr. Kennedy's personal friends his memory will be treasured with affectionate regard and attachment; and it will be a satisfaction to them to know that his mental faculties remained perfectly unclouded to the last. Within very few days of his death he transacted some important business with as clear an intellect and as good a memory as he manifested in his earlier days; and the very evening before his death, in a small family reunion, he displayed his usual cheerfulness, self-possession, and accurate recollection of past events. On rising next morning he experienced a slight difficulty of breathing, which gradually increased; but his departure from life was so tranquil that it was for a short time doubtful whether he was dead or asleep."

drawing for reeds used in the loom. In this he was disappointed, and afterwards adopted a second pair of rollers, the latter pair revolving at a slower speed than the former, and thus produced a draught of one inch in three or four. **** This was certainly neither more nor less than a modification of Mr. Arkwright's roller beam; but he often stated to me that when he constructed his machine he knew nothing of Mr. Arkwright's discovery. Indeed we may infer that he had not, otherwise he would not have gone thus rudely to work, and indeed the small quantity of metals which he employed proves that he could not have been acquainted with Mr. Arkwright's superior rollers and fixtures in iron, and their connexion by clock-work. * * * * * His first machine contained only about twenty or thirty spindles. He finally put dents of brass reed-wire into his under rollers and thus obtained a fluted roller. But the great and important invention of Crompton was his spindle-carriage, and the principle of the thread's having no strain upon it until it was completed. The carriage with the spindles could, by the movement of the hand and knee,

recede just as the rollers delivered out the elongated thread in a soft state, so that it would allow of a considerable stretch before the thread had to encounter the stress of winding on the spindle. This was the corner stone of the merits of his invention."

It thus appears then that Louis Paul invented the process of spinning by rollers, but failed to establish the practice though he demonstrated its utility; that Highs re-introduced it to a certain but not profitable extent; that Arkwright adopted the plan, well knowing the fact that rollers had been successfully used and also the mode of their operation; while Crompton, with a mere hint that rollers were used for the purpose, but utterly ignorant of the manner of their use, re-invented the system, wedded it to the useful jenny-wheel of poor Hargreaves, and endowed that union with the spindle-carriage, "the corner stone," as Mr. Kennedy truly said, "of the merits of his invention."

CHAPTER VI.

Machine-breaking Riots. Crompton completes his Invention. Procures a Silver Watch. His Courtship and Marriage. Appearance and Character of the Bride. Parson Folds. The Trade surprised by the New Yarn. Brilliant prospects of Success. The attempts made to discover his Secret. The Hall-in-the-Wood besieged.

Just as Samuel Crompton was on the very eve of completing his first Mule in 1779, and anxiously desirous to test it by putting it to actual work, the Blackburn spinners and weavers who had previously driven poor Hargreaves from his home were again excited to renew their former riotous proceedings, their own ignorant prejudices against machinery being increased by the erroneous opinions of many of the middle and upper classes who now entertained the greatest possible dread of the changes in trade and manufacture which they saw approaching. Every jenny for many miles round Blackburn was destroyed, excepting such only as had less than twenty spindles. When this storm was

raging Samuel took his new machine to pieces and concealed the various parts in a loft or garret near the clock in the old Hall.⁶³ There they remained hid for many weeks ere he dared to put them together again. But in the course of the same year the Hall-i'-th'-Wood wheel was completed, and the yarn spun upon it used for the manufacture of muslins of an extremely fine and delicate texture.

It must have been about this time that Samuel became possessed of that object of honourable ambition to all young working men, a silver watch, the fruit of his own labour. It is said that the earliest earnings obtained from the new wheel were devoted to this purpose.⁶⁷

⁶⁶ Some of the wheels and other machinery of a large clock still remain fixed to the beams in the attic of the Hall-in-the-Wood. This clock appears to have had no face; its office was to strike the hours upon a large bell suspended under a bell-cot on the roof, which must have been heard for a considerable distance down the valley. The bell has been removed, but its position is clearly indicated.

⁶⁷ This watch is preserved as a precious relic of his ancestor by Samuel Crompton Esq. of Cavendish Place, Manchester, grandson and nameson of the inventor of

The watch was made expressly for him by George Hodson of Bolton at an expense of five guineas. Crompton paid many visits to the maker's shop while it was in progress, and watched the work with great interest and some impatience; it was his constant companion during the fifty years of his after life.

Though he encountered and overcame many serious difficulties during the five eventful years we have spoken of, yet in the latter half of them he enjoyed a full measure of human happiness, for during that period he met with, courted and married his amiable and excellent wife Mary Pimlott. She was the daughter of a Mr. Pimlott who resided at New Heys Hall,⁶⁸ near Warrington. This gentleman had been a West India merchant in partnership with his cousin, one of the Mathers of Ratcliff Bridge. They

the Mule. Mr. Crompton kindly permitted it to be exhibited to the audience on the occasion of the first portion of this Biography being read to the mechanics of Bolton.

⁶⁸ New Heys Hall is situated about midway between Newton-le-Willows and the village of Winwick. The name of Pimlott is still to be met with in that locality.

possessed two ships in which Mr. Pimlott exported oatmeal, sending it to his partner who resided abroad. Of the nature of the returns he received, nothing is known except one item only (and that probably an unprofitable one) a monkey, which was long retained and became a favourite in the family. During the time that Mr. Pimlott rented New Heys Hall that property was litigated, and, unfortunately for him, he supported the unsuccessful claimant by advancing money and pledging his credit to assist him in the lawsuit. As a natural consequence of this imprudence Mr. Pimlott was ruined and died broken hearted. This probably caused his daughter to reside with friends at Turton, where ample and profitable employment could be obtained by spinning on Hargreaves's jenny. In this art she was particularly expert, a circumstance which is said to have first attracted young Crompton's attention towards her. She was a very handsome darkhaired woman of middle size and erect carriage, though of somewhat delicate constitution, and was possessed of great power in the perception of individual character - so much so indeed as

to be almost gifted with an additional sense, "something like Scotch second sight, by which she could tell a rogue in an instant and warn her family to have nothing to do with him."69 They were married at the Parish Church of Bolton on the 16th of February, 1780, by the Rev. James Folds, the witnesses being John Orrell, a name still common in the neighbourhood, and James Livsey.⁷⁰ The officiating clergyman, best known as Parson Folds, was a popular and somewhat eccentric character in Bolton during a great part of Mr. Crompton's career; and their families became ultimately connected by the marriage of Mr. Crompton's son James to a relative of Mr. Folds.

Samuel Crompton took his wife home to the Hall-i'-th'-Wood, but not to reside with his

⁶⁹ From the recollection of her eldest son, the late Mr. George Crompton.

⁷⁰ At the present time the most opulent and influential inhabitants of Bolton are spinners; but when Crompton was married, weaving was considered an occupation of higher social position; consequently, though the new wheel was then completed, he signed his name in the church books as a "weaver."

mother. The young couple set up their humble establishment in a cottage attached to the old Hall, though he continued to occupy one or more of the large rooms in the mansion; and in one of these he now operated upon the Mule with the utmost secrecy, and with a success which startled the manufacturing world by the production of yarn which, both in fineness and firmness, had hitherto been unattainable by any means or at any price. The new wheels were thus triumphantly successful, and promised their inventor an ample fortune. Possessed of them and their secret; blessed with a wife whom he ardently loved; with youth, health, and a spirit full of high and well-based hope; his prospects in life were at this time singularly brilliant and promising.

The few early months of wedded life in the spring of 1780 must have proved to this young couple a season of brief but exquisite happiness. One cannot help picturing their pleasant evening rambles in the meadows and along the brooks and hedge-rows which surrounded their beautiful and romantic residence, and the sanguine but reasonable anticipations of high for-

tune with which they flattered each other in their quiet, confidential conversations; for to all but them, and probably his mother and sisters, the wonderful new wheel was as yet a well guarded secret. This sunshine of their lives was however, unhappily, very short; the clouds which shrouded their after lives with adversity were already gathering over their heads.

Samuel Crompton was then twenty-seven years of age and the acknowledged inventor of a machine, which from the first hour of its operation, altered the entire system of cotton manufacture in this country. Its merit was universally acknowledged by all engaged in the trade who had an opportunity to examine the varn spun upon it, or the fabrics made from that yarn. They at once saw that the greatly desired muslins so long imported from the East Indies could now be made at home if the new yarn could be produced in sufficient quantity. Assisted by his excellent and amiable young wife he industriously spun at the Hall-in-the-Wood with the greatest possible privacy small quantities of this much coveted yarn, producing week after week higher counts and an improved

quality, for which he readily obtained his own price.⁷¹

71 "Crompton informed Mr. Ballantyne that on the invention of his machine he obtained 14s. per lb. for the spinning and preparation of No. 40 (i.e. yarn weighing forty hanks to the pound); that a short time after he got 25s. per lb. for the spinning and preparation of No. 60; and that he then spun a small quantity of No. 80 to show that it was not impossible, as was supposed, to spin yarn of so fine a grist, and for the spinning and preparation of this he got 42s. per lb." — Encycl. Britannica, "Cotton Manufacture." Mr. Baines observes that "these prices were commanded by the unrivalled excellence of the yarn; and it affords a criterion to estimate the value of the machine, when it is found that the value of yarn No. 100 is at the present day (1835) only from 2s. 3d. to 3s. per lb., including the cost of the raw material, which is 10d. or 1s., this surprising reduction having been effected chiefly by the powers of the mule; and that whereas it was before supposed impossible to spin 80 hanks to the lb. as many as 350 to the lb. have since been spun, each hank measuring \$40 yards, and forming together a thread 167 miles in length." - Baines's History of the Cotton Manufacture, p. 200. The author at the time of the Great Exhibition of 1851, being then Honorary Secretary to the Bolton Commissioners and Committee, was presented with samples of cotton yarn spun in the parish of Bolton so fine as 700 hanks to the pound, or at the rate of 334 miles in length, spun from one pound of material.

To a man of his industrious habits, with a modest and retiring disposition, quite unaccustomed to any expensive enjoyments, and having no higher ambition than to spin the very best varn in the trade through a quiet life of comfort and content, there appeared at first sight no possible cause to prevent the full realization of his moderate wishes; but, paradoxical as it may appear, it is simply the truth that the wonderful perfection of his principle of spinning was mainly instrumental in depriving him of that harvest which he had so laboriously tilled and sown and watered. The demand for the new varn was so extensive and so urgent that the supply from the Hall-i'-th'-Wood could not satisfy one hundredth part of it, and daily and hourly that demand increased. The consequence was that the old Hall was besieged by manufacturers and others from the surrounding districts—many of whom came to purchase yarn, but many more prepared to penetrate the mystery of the wonderful new wheel and to discover the principle of its operations by any means in their power. All kinds of stratagems were practised to obtain admission to the house; and when this was denied many climbed up to the windows outside by the aid of harrows and ladders to look in at the machine. Crompton erected a screen to protect himself from this kind of observation, but even that did not at all times serve the intended purpose. One inquisitive adventurer is said to have ensconced himself for some days in the cockloft, where he watched Samuel at work through a gimlet hole pierced through the ceiling. He was in this way subjected to all kinds of impertinent intrusion and annoyance, so that he was unable to prosecute his labour with comfort or advantage.

CHAPTER VII.

Arkwright visits the Hall-in-the-Wood. The retention of Crompton's Secret impossible. Divulged upon promise of Recompense. That promise broken. Trifling Subscription. His Disappointment, and its effects.

About this time a visit appears to have been made to the Hall-in-the-Wood by Richard Arkwright, then at the height of his successful career, under circumstances which induce us to narrate the particulars as nearly as possible in the words of our informant.⁷²

Arkwright married the daughter of Robert Holt a schoolmaster, and his wife was aunt to Miss Jenny Woods of Turton. This young lady was the bosom friend of Crompton's wife, and attended upon her at her first down-lying of her son George at the Hall-i'-th'-Wood. Samuel Crompton, acting as substitute for his mother who at that time held the office of

⁷² Mr. John Seddon, a friend and companion of Samuel Crompton during the latter part of his life, now resident in Little Bolton.

overseer of her township, was frequently absent collecting the rates; and on one of these occasions Miss Woods, who, as was said before, was niece to Arkwright by marriage, contrived that her uncle and aunt should visit the Hall-in-the-Wood in his absence on pretext of a friendly call upon the young mother, but with the real purpose of secretly inspecting the new wheel by her connivance.

Our informant added "that Miss Jenny Woods afterwards married his cousin and lived at the Willows, where he has heard them mention the circumstance, and also that Mr. Crompton himself had more than once related to him the particulars of this visit." Though there is no doubt that this story is correct as to the principal fact, yet there must be considerable error in some of the particulars, as Arkwright's first wife Patience Holt had been dead upwards of twenty years when Crompton's invention was completed. It is however very likely that Arkwright, who was so deeply interested in all improvements in cotton machinery, and not very scrupulous about the means of acquiring information where his interests were concerned, would endeavour to discover the secret of the new wheel which threatened to, and indeed did all but, eclipse his water frame. It is then extremely probable that he made the visit accompanied by his second wife Margaret Biggins, who as well as his first wife was a native of the neighbourhood of Bolton.

It has always been understood by Crompton's descendants that Arkwright made this surreptitious visit; and we learn that in one of his still existing letters he mentions a gentleman having travelled sixty miles to see the wheel. Cromford, where Arkwright then resided, is about sixty miles from Bolton; and there is this good reason why Mr. Crompton should not mention Arkwright's name in connexion with the transaction, that he was in after life under great obligation to that gentleman's son.

Samuel Crompton appears to have soon discovered the utter impossibility of retaining his secret, or of spinning upon the machine with the undisturbed secrecy he desired; and it is most lamentable to know that his unmerited misfortunes commenced at the very moment that he should have begun to reap the fruits

of his great invention. In a Manuscript left behind him, from which we have previously quoted, he says: "During this time I married, and commenced spinner altogether. But a few months reduced me to the cruel necessity either of destroying my machine altogether or giving it up to the public. To destroy it I could not think of; to give up that for which I had laboured so long was cruel. I had no patent, nor the means of purchasing one. In preference to destroying, I gave it to the public." 73

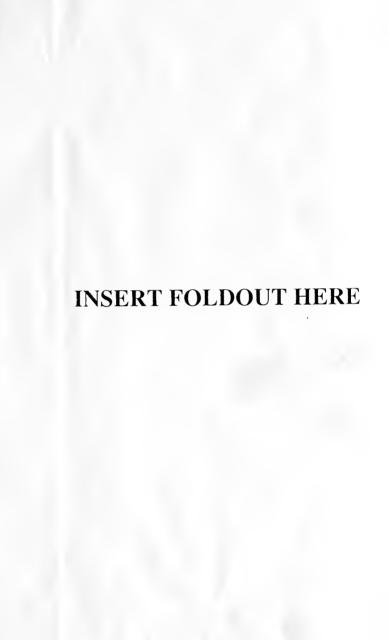
The gift to the public was however by no means unconditional. Having discovered, as he himself said, "that a man had a very insecure tenure of a property which another could carry away with his eyes," he yielded to the urgent solicitations and liberal but deceitful promises of numerous neighbouring manufacturers, and surrendered to them not only the secret of the principle upon which he spun the much-prized

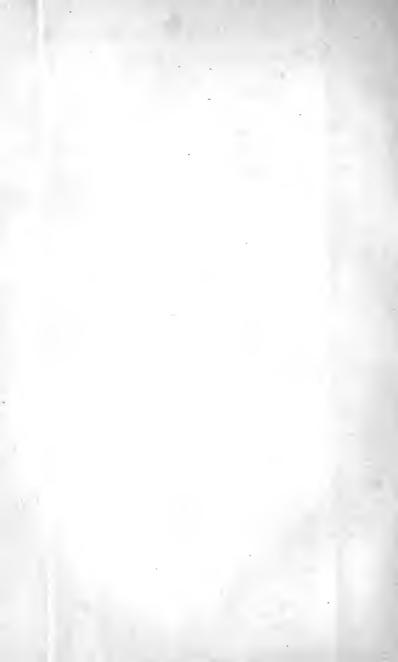
⁷³ From a manuscript document circulated by Mr. Crompton in 1810 (? 1811), printed in Brown's pamphlet advocating Crompton's claim for additional national remuneration. p. 21.

⁷⁴ Kennedy's Brief Memoir of Samuel Crompton.

varn but the machine itself upon which the operation was performed. He does not appear to have received a single shilling in advance, or any payment whatever, at the time of this surrender; but in the simplicity of his honest heart he trusted to the following one-sided agreement prepared by his manufacturing friends, which bound them to nothing whatever, and afforded him no means of legally enforcing payment of the sums which they promised to subscribe. The document, upon the faith of which the Mule was surrendered, was drawn up in these words: "We, whose names are hereunto subscribed, have agreed to give, and do hereby promise to pay unto, Samuel Crompton, at the Hall-in-the-Wood, near Bolton, the several sums opposite to our names, as a reward for his improvement in spinning. Several of the principal tradesmen in Manchester, Bolton, &c., having seen his new machine, approve of it, and are of opinion that it would be of the greatest public utility to make it generally known, to which end a contribution is desired from every well-wisher of trade."75

⁷⁵ From a manuscript copy of the Agreement in the





It appears that Mr. Crompton had asked the advice of Mr. Pilkington of Bolton, then a very extensive manufacturer,76 to whom he had imparted the secret of his discovery and in confidence permitted him to inspect the new wheels. Mr. Pilkington's report was most favourable; and it is difficult to understand why he did not advise Crompton to secure his discovery by patent and assist him in procuring it. But there can be no doubt from Mr. Pilkington's high character as a tradesman and gentleman that the advice he offered was entirely disinterested. It is not improbable that both he and Mr. Crompton were actuated too much by the generous promptings of their own warm hearts; certainly they both neglected to practise the

handwriting of Samuel Crompton, in the author's possession.

⁷⁶ Mr. (afterwards Major) Pilkington of Silverwell House, Bolton, departed this life on the 28th of November, 1828, much respected and regretted by the inhabitants. His tombstone on the south side of the Parish Church, Bolton, bears these strictly appropriate words: "In life honoured and beloved — his end was full of peace." Mr. Pilkington was born in the same year as Samuel Crompton, and outlived him only one year.

cool-headed and discreet caution so requisite in a transaction of this nature. The miserable result was, that according to Mr. Kennedy's account, about £50 only accrued to Mr. Crompton from this source; 77 while on the authority of Mr. Pilkington the gross receipts amounted to £106. 78 Mr. Crompton himself says: "I received as much by way of subscription as built me a new machine with only four spindles more than the one I had given up — the old one having forty-eight, the new one fifty-two spindles." 79

⁷⁷ Brief Memoir of Samuel Crompton, by Kennedy.

⁷⁸ Evidence of "Mr. John Pilkington, merchant and manufacturer at Bolton," before a Committee of House of Commons.

⁷⁹ Letter of Samuel Crompton to Sir Joseph Banks, Bart., printed in Brown's pamphlet advocating his claim for additional compensation. p. 17. Unfortunately the draft of this letter with many interesting documents, were entrusted by Samuel Crompton to a Mr. J. Brown about the year 1825 or 1826. This gentleman was engaged in some literary employment in Bolton, and published in parts an incomplete "History" of that town of considerable merit. His speculations were however very unfortunate. He left Bolton, and soon after came to an unhappy end by his own hand in London. Mr. Crompton's

That Mr. Crompton's statement is probably the most correct may be gathered by reference to an existing copy of the agreement and list of the subscribers in his own handwriting.80 There are fifty-five subscribers of one guinea each, twenty-seven of half a guinea, one of seven shillings and sixpence, and one of five shillings and sixpence, making together £67 6s. 6d.; but as it is known that several did not pay at all, and that he was at considerable expense of time and money in personally collecting the subscriptions of others, it may be assumed that the amount received did not exceed £60. The list is curiously interesting as containing among the halfguinea subscribers the names of many Bolton firms now of great wealth and eminence as mule spinners, whose colossal fortunes may be

family have used all means to trace the documents placed in Mr. Brown's hands, but as yet without success. The pamphlet which Brown published (or at least printed) in advocacy of Samuel Crompton's claims was well intentioned but produced no beneficial result.

⁸⁰ This interesting document was presented to the author by Samuel Crompton Esq. of Manchester, and exhibited to the Bolton mechanics. It is reprinted with the list of subscribers in Appendix No. IV.

said to have been based upon this singularly small investment.

No sooner was the Mule given up to the public than the subscriptions entirely ceased. Crompton's hopes of reward and remuneration were blasted, and many of those who had previously given their names evaded or refused payment. Let us again use his own words in describing this very shameful transaction: "At last I consented, in hope of a generous and liberal subscription. The consequence was that from many subscribers, who would not pay the sums they had set opposite their names when I applied to them for it, I got nothing but abusive language given to me to drive me from them, which was easily done, for I never till then could think it possible that any man (in such situation of life and circumstances) could pretend one thing and act the direct opposite. I then found it was possible, having had proof positive."81

It thus appears that the money received for giving publicity to his wonderful invention

⁸¹ Crompton's Letter to Sir Joseph Banks, Bart., printed in Brown's pamphlet. p. 16.

merely sufficed to replace the machine he had given up; and for his loss of time, study and toil he had not as reward or recompense a single shilling. But this pecuniary loss was less mortifying to his honourable and sensitive mind than the deceitful ingratitude he met with from too many of the persons he had so generously trusted. A record exists with the names of some of the men who used him thus infamously; but we blot these names from our paper, and spare their descendants the mortification of learning that when Samuel Crompton respectfully asked their ancestors to pay their promised subscriptions, and put before them their own written agreement to do so, they denounced him as an impostor and asked him how he dared to come on such an errand! By this means many saved their miserable guinea (for that was the utmost extent of any subscription), but at what a fearful sacrifice of honesty and honour!

There is ample existing evidence that this shameful treatment rested in Crompton's memory through life, making him to some extent a moody and mistrustful man. Unfortunately

a succession of somewhat similar events yet to be narrated, confirmed this feeling, and induced him to shrink from publicity and to be chary and cautious of bestowing his confidence even on those friends best disposed to help him.

CHAPTER VIII.

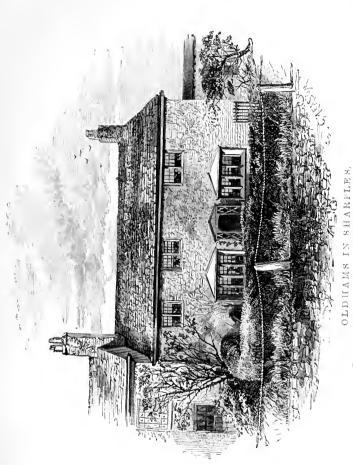
Success of the Mule during the five years after its invention. Mr. Crompton removes to Oldhams. Mr. George Crompton's account of his Introduction to the Cotton Trade. Visits of Mr. Peel to Crompton at Oldhams. Their purpose and results. Attendance of the family at Church. Dress of George Crompton. Inoculation by Dr. Barlow. Thomas Brindle's remembrance of Oldhams.

During the following five years the Mule was generally employed for fine spinning not only by the manufacturers round Bolton, but throughout the manufacturing districts of England, Ireland, and particularly Scotland, where the peculiar yarn of this machine was in the highest degree useful. All these machines were as yet worked by hand; they were erected in garrets or lofts, and many a dilapidated barn or cowshed was patched up in the walls, repaired in the roof, and provided with windows to serve as lodging room for the new muslin wheels.

At what exact time we have been unable to learn, but certainly before the year 1785, Mr.

Crompton removed from the Hall-in-the-Wood, and occupied the farm-house at Oldhams in the township of Sharples, about two miles north of Bolton. This residence is the smaller of two houses situated in a very retired spot on the left side of, but at some distance from the road leading from Astley Bridge to Belmont. Here he farmed several acres of land, and kept three or four cows. His machine was erected in the upper story of this house, and he continued to spin upon it with as much privacy as possible. He was nevertheless still haunted by hundreds of curious visitors, who would insist

so In the absence of any other known reason for leaving the Hall-in-the-Wood, it may be inferred that Mr. Crompton removed to Oldhams for the advantage of greater privacy in the prosecution of his business. He always took much interest in the ancient Hall, and was in the habit of visiting it periodically up to the last year of his life. To Mr. and Mrs. Bromiley, who have occupied the mansion for nearly forty years past, he used to point out the particular rooms in which he worked at his machine and where his loom was placed. A singularly interesting but very little room immediately over the porch he appears to have had for his private use; it was then called his "conjuring room."



Formerly a residence of Samuel Crompton, myentor of Mule Spinning.



on seeing the improvements he was supposed to have made on it; and to prevent their intrusion he contrived a secret fastening to the door leading to the upper story. Excelling all other spinners in the quality and fineness of his yarn, he continued to obtain a high price for all he could produce, notwithstanding the considerable competition he was now compelled to encounter. His eldest son George was born at the Hall-i'th'-Wood on the 8th January 1781. but his earliest recollections referred to Oldhams. The following description of his infantile introduction to the cotton trade, as narrated during a visit he paid to the author in May 1854, is given as nearly as possible in his own words: "When I was quite a child my father removed from Hall-i'th'-Wood to Oldhams, and there two brothers and a sister were born. I recollect that soon after I was able to walk I was employed in the cotton manufacture. My mother used to bat the cotton wool on a wire riddle. It was then put into a deep brown mug with a strong ley of soap suds. My mother then tucked up my petticoats about my waist, and put me in the tub to tread upon the cotton at the bottom.

When a second riddleful was batted I was lifted out and it was placed in the mug, and I again trode it down. This process was continued until the mug became so full that I could no longer safely stand in it, when a chair was placed beside it, and I held on by the back. When the mug was quite full, the soap suds were poured off, and each separate dollop⁸³ of wool well squeezed to free it from moisture. They were then placed on the bread-rack under the beams of the kitchen-loft to dry. My mother and my grandmother carded the cotton wool by hand, taking one of the dollops at a time on the simple hand-cards. When carded they were put aside in separate parcels ready for spinning."

Mr. George Crompton had a vivid recollection of two visits paid to Oldhams by the first Sir Robert Peel, then an eminent though *untitled* manufacturer, transacting business in Bolton under the firm of Peel, Ainsworth and Co.⁸⁴ On his first visit Crompton was absent, but Mr. Peel chatted with his wife, and gave young

^{83 &}quot;Dollop:" a lump of anything. — Halliwell's Dictionary of Archaic and Provincial Words.

⁸⁴ And in Bury, as Peel, Yates and Co.

George half a guinea. Mrs. Crompton, going into her dairy to bring her guest a bowl of milk, Mr. Peel took the opportunity to ask the boy where his father worked. George was pointing out the nail-head, which on being pressed lifted the concealed latch of the door leading to the upper story, when his mother returned with the milk, and by a look warned him that he had committed an error.⁸⁵

It is understood by his family, on the information of Mr. Crompton himself, that the objects of Mr. Peel's visits were, first to induce him to accept a lucrative situation of trust in his establishment, and afterwards an offer of partnership. Both of these offers Mr. Crompton declined, partly it is believed from a somewhat morbid desire for independence that clung to him through life; partly from a jealous sus-

So The farm-house at Oldhams remains much in the same condition as it must have been when occupied by Samuel Crompton; the positions of the kitchen, the dairy, and the door at the bottom of the stairs leading to the upper rooms, are in all respects consistent with the circumstances of this story. The wood engraving, from a photograph by Mr. Knott of Little Bolton, is an excellent representation of this retired residence.

picion of persons in superior social position, caused (as has already been said) by the cruel treatment he received when he surrendered his first mule; but most of all from a feeling of personal dislike to the future baronet, which he entertained all his life, arising (as we have been informed) from some disagreement on the occasion of Mr. Peel's first inspection of the mule. 66

It is much to be deplored that these offers were rejected, because the eminent and enterprising business talent of Mr. Peel was exactly the proper buttress to support Crompton's splendid inventive genius. A combination of these two men as partners at this particular time would have hastened the successful deve-

Er co. - er . . .

set It is said that when Mr. Peel called at the Hall-in-the-Wood to see the new wheel, in terms of his subscription of one guinea from Peel, Yates and Co. of Bury, (the Bolton firm of Peel, Ainsworth and Co. did not subscribe,) he brought with him several mechanics in his employment, who inspected it along with him, and were able to carry away its details in their memory. To this there could be no reasonable objection, as such was the known purpose of the visit; but Samuel Crompton could not forget or forgive the indignity of being offered a payment of sixpence cach for these men.

lopment of the cotton trade by at least twenty years; and must have secured to Crompton and his children a fortune equally princely and as well deserved as those which are now worthily enjoyed by the descendants of Peel and Arkwright.

The family at Oldhams led the same life of strict and high toned piety to which they had been accustomed at Hall-i'th'-Wood, attending the service at All Saints' Church with great regularity on every successive Sunday. At noon they had a frugal meal of broth⁸⁷ at a public house, attended the afternoon service, all invariably returning home again before "milking time."

Mrs. Crompton was an exemplary mother, fond and proud of all her children, but particularly so of her eldest son, of whom she used to boast that "he was as smart as any body's;" his own recollection of his first Sunday suit corroborates the truth of her remark. He remembered it to have been a scarlet jacket, nankeen trousers, and red morocco shoes; and also, that his mother dressed and curled his

⁸⁷ And occasionally a gill of ale for the father.

hair before going into church, as it was so soft and long that it would not keep in curl during their walk from home.

He well remembered also that Dr. Barlow of Bolton inoculated his sister, two brothers, and himself.⁸⁸ The operations were very hastily performed, as the good Doctor stole a minute or two for the purpose from the exciting amusement of the chase. He wore a scarlet coat, and was "out with the hounds" in the immediate neighbourhood of Oldhams.

In further illustration of Crompton's mode of life when at Oldhams, we give the particulars of a conversation with the late Thomas Brindle, then eighty-three years of age, and in possession of a good memory. In reply to enquiries put to him Thomas stated "that he was born at Sweetloves, so and remembers the time before there were any factories or ought o'th' sort; was a weaver when a boy, and remembers

⁸⁸ In the same year that Samuel Crompton gave his invention (the Mule) to the nation, Jenner made public his important discovery of Vaccination.

⁸⁹ A hamlet in the township of Sharples, about midway between the Hall-in-the-Wood and Oldhams.

when Arkwright's Water Twist and Hargreaves's Jenny were introduced; weavers then thought themselves well off; farmers used to gait a jenny with twelve spindles, which they put up with a foot treadle, but when Samuel made the Hall-in-the-Wood wheels they put all the jennies aside; thinks that weaving factories are the ruination of the country; when a boy, used to be sent to Crompton's at Oldhams for milk; he lived in the small or farm-house, kept some cows, and had a wife and three or four children: used to give me odd thimbles and bits of things sided from his machinery. When cambrics were made for ladies' dresses weavers were vast weel off, could get six and thirty shillings a week; they were finished at the croft with irons; all cloth was then bleached i'th' sun, now it never sees day-leet; had seen twenty acres of ground covered with cloth at Dunscar. Was a keen fisher when young; used to dam and lade, and often went out with a lantern at night and killed them i'th' dark — all trouts and now and then a snigg; am now a mole catcher. Mr. Crompton was an industrious man, but lost all his brass by going to Darin a-bleaching; Sam'l

was a very quiet civil felly, and a rare good fiddler." 90

Thomas Brindle walked several miles to see the author in May, 1854, when he told the simple story of his life. He and many others to whom the author is indebted for much of the information collected in this volume, have since departed this life.

CHAPTER IX.

The Mule perfect in principle, but of rude construction. Improvements. Arkwright's Patents thrown open. Carding and Roving. Crompton's Workpeople bribed. He destroys his Machine. Crompton's Character. Sir Richard Arkwright.

Though the new Hall-in-the-Wood wheel started into existence in 1780 perfect in its principle of action, it was nevertheless a very rude machine in its details, and as unlike as possible to the highly-finished mules of the present day. No sooner however was it made over to the public than operatives of many other trades turned their attention to its use, and from the diversity of their previous employments each man applied the material to which he had been most accustomed for repairs and alterations, a circumstance which speedily advanced the machine to a condition of very considerable improvement. One important step was made by Henry Stones⁹¹ of Horwich, who superseded Crompton's rude rollers of wood by

⁹¹ Kennedy's Brief Memoir of Samuel Crompton.

metal rollers, similar to those employed on Arkwright's water-frame. Some impediment to its early success was doubtless caused by the patents held by Mr. Arkwright and his partners for the machinery employed in the preparatory processes of cleaning, carding and roving, though they were frequently evaded. In 1785, however, an important decision of the Court of King's Bench threw them open to the public, it having been proved that the engines in question were not Arkwright's inventions, but had been used by other parties before he took out his patents. The immediate consequence of this decision was to communicate a wonderful impulse to the cotton manufacture in general, but particularly to the art of spinning on the mule, which could be practised by any one, as it was entirely unfettered by patent or concealment.

One of the first mules we have heard of apart from those used by Crompton himself, was of forty spindles only. It was erected in a loft above a school-room in the village of Astley Bridge. Our informant⁹² was one of three children who pieced upon it. He remembered

⁹² The late Mr. Thomas Platt.

crowds of people coming to see it, and that rovings for this mule and also for Samuel Crompton's own use were prepared by his The carding was done by machinery put up about that time in a portion of the buildings now included in the bleachworks of Messrs. Lewis Murton and Co., near Astley Bridge. These cardings were in short lengths only, the system of continuous carding not having been at that time introduced into Bolton, a circumstance which serves to date the use of this mule in the year 1785, or earlier. siderable progress and improvement must have been made immediately after that year, as we gather from a memorandum of a conversation with another veteran spinner94 who stated that "in the year 1786 he was employed to piece on the biggest mule then in Bolton, containing one hundred and eight spindles. The spinner was David Grime, who paid him two shillings a

⁹³ Edward Platt.

⁹⁴ The late Mr. William Holden, whose brother, John Holden, was for some years bookkeeper to Samuel Crompton, when a partner in the firm of Wild and Crompton.

week for piecing." Our informant remembered being often sent to Doctor Physic⁹⁵ for rovings, which were procured in three or four ounces at a time. This person had an 18-inch machine for carding in continuous lengths, which is supposed to have been the first of that kind successfully employed in Bolton.

A matter of so much importance as the preparation for spinning was not likely to escape Crompton's active and inventive mind. Mr. Kennedy⁹⁶ states, from information derived from Crompton himself, that "in 1784 or 1785 he made a carding machine, the working of which was a little different from those in common use. The main or large cylinder was made to turn in an opposite direction, thereby carding or combing the cotton downward from the rollers, and of course upwards from the doffing cylinder. His object was to get an easier egress for the waste or dirt that was in the cotton, and to

⁹⁵ The use of quaint and sometimes burlesque christian names, such as Doctor, Squire, Lord, Major, &c., was not uncommon fifty years ago, and is not yet discontinued in the parish of Bolton.

⁹⁶ Kennedy's Brief Memoir.

save the trouble of stripping, &c.; but this was not followed up so as to be practically useful."

We may here mention an anecdote told by Crompton respecting his earliest acquaintance with that amiable and excellent man, who by a happier fortune than that which frowned upon himself lived to be his friend, benefactor and biographer. Kennedy and M'Connel, who afterwards became partners as eminent machinemakers and spinners in Manchester, were about this time apprentices with Mr. Cannon, a machine maker at Chowbent or (as we should now say) Atherton. From their master Crompton had ordered a small carding-machine, so small that it could easily be conveyed in a wheelbarrow, but these two enterprising and inquisitive young men contrived to be sent with it in a cart, and told Crompton that "they had come to set it up." He however quietly observed, "I will try to set it up myself; I think I can." He always said afterwards that "the Scotch lads wanted to go up stairs to see the other machinery, but I gave them some bread and cheese and sent them home again."

In 1786 the principle of the mule was applied to a new purpose by adapting it to a machine for the preparation of rovings, to be afterwards spun on the mule itself, on Hargreaves's jenny, or on Arkwright's water-frame. This machine, called the Billy, was of much importance in spinning both cotton and wool, as it enabled the rovings of each to be made at a greatly decreased cost, and of any required degree of fineness. The invention, or rather adaptation, was the work of a Manchester person named Stockport; it was a happy and ingenious arrangement, and one which greatly extended the utility of the mule, though it has since been superseded by a still better contrivance.

It may well be supposed that about this time, when every person who possessed a mule worked upon it most profitably, that Crompton its inventor, the oldest and most experienced spinner upon the machine, would have succeeded at least as well if not much better than any of his neighbours. But once again his celebrity thwarted his reasonable hopes. He spun indeed the best and finest yarn in the

market, and continued to obtain the highest price for it, but his production was restricted to the work of his own unassisted hands (an increasing family having deprived him of the aid of his wife); for, whenever he commenced to teach any new hands to assist him in his work, no matter how strictly they were bound to serve him by honour, by gratitude, or by law, so soon as they acquired a little knowledge and experience under his tuition, they were invariably seduced from his service by his wealthy competitors, - the very same men, in many instances, who had previously so unfairly possessed themselves of the secret of his invention. He has thus recorded the facts of this additional injustice: "I pushed on, intending to have a good share in the spinning line, yet I found there was an evil which I had not foreseen, and of much greater magnitude than giving up the machine, viz. that I must be always teaching green hands, employ none, or quit the country; it being believed that if I taught them they knew their business well. So that for years I had no choice left but to give up spinning, or quit my native land. I cut up

my spinning machines for other purposes." On one occasion when much incensed by a repetition of this injustice, he seized his axe and broke his carding machine in pieces, remarking "They shall not have this too." This treatment he felt as a cruel aggravation of previous ill-usage, and it tended to increase the feeling of misanthropy which was already rankling in his mind. It thus appears that this meritorious but unfortunate man — in utter despair of advancing his own position in life by the aid of his transcendent invention, which while bringing fortunes to hundreds, bread to thousands, and increased comfort to millions round about him, left him

⁹⁷ Extract from a letter written by Samuel Crompton.

⁹⁸ Mr. Crompton's son James was present at the time, and has frequently mentioned this circumstance to his widow, and to his son, by whom the information is communicated. Crompton had a favourite small axe, which he used in constructing the first mule, and probably also for the destruction of the second. This axe has been preserved, and treasured as a relic by a family in the neighbourhood, who knew and esteemed him. It was exhibited to the mechanics of Bolton on the occasion of the author's second lecture on the "Life and Times of Samuel Crompton."

and his family nevertheless in comparative poverty — was compelled to renounce the use of his mules, and to betake himself to his original occupation of weaving, or at least to spin only such yarn as he could employ in his own looms as a small manufacturer. This bitter necessity must have been doubly painful to him, as it occurred about the same time that David Dale of Lanark first employed water power to turn the mule frames, thus greatly increasing their importance and value; and also by the fact that Sir Richard Arkwright, who died soon after, left enormous wealth in land, money, mills and machinery to his two children.⁹⁹

Let us for a moment contrast the characters and the fortunes of these two remarkable Bolton men. Crompton's start in life was made from a much more favourable position than Arkwright's. A carefully-nurtured only son, his early education was excellent, and during his long life he persevered in acquiring knowledge. By continued self education, based upon his excellent school tuition under Barlow, he

⁹⁹ Sir Richard Arkwright died on the 3rd of August 1792, in his sixtieth year.

had made himself conversant with algebra and trigonometry. He was a good mathematician, and so expert in arithmetical calculations as to be frequently consulted in disputes on such He was an accomplished musician, matters. with much knowledge of the science and great practical skill in playing on various instruments. Handel and Corelli were his favourite composers; and his musical friends so well knew his power as a timist that they chose him leader of their concerts and practice-meetings. 100 Next to music he delighted in mechanics, and spent much time in inventing and constructing with his own hands implements for his trade, and even articles of domestic furniture. took much pleasure in the practice of his own art, and had an honourable pride in spinning the finest yarn and weaving the most delicate muslins in the trade. No man however can excel in all things; and it was Mr. Crompton's

¹⁰⁰ He played on the violin with great skill, was frequently invited to attend concerts at the Earl of Wilton's (then Sir Thomas Egerton), and such was the correctness of his *time*, that however many erred *he* could not be led away with them.—*Manuscript memorandum by a relative*.

misfortune to undervalue and disregard that practical knowledge of the world and of men which is essentially necessary for success in any business. This rendered him quite unable to dispose of his yarn and muslins when he had made them, however great their intrinsic value. His naturally shy disposition moreover had been increased and his temper injured by the cruel injustice which had so frequently blighted his hopes when in the bud. This peculiarity of character may be best understood from his own words: "I found to my sorrow I was not calculated to contend with men of the world; neither did I know there was such a thing as protection for me on earth! I found I was as unfit for the task that was before me as a child of two years old to contend with a disciplined army."101 And such was indeed the fact. When he attended the Manchester Exchange to sell his yarns or muslins, and any rough-and-ready manufacturer ventured to offer him a less price than he had asked, he would invariably wrap up his samples, put them into his pocket, and quietly walk away.102 He was

¹⁰¹ Letter of Samuel Crompton.

never either in want or in debt. Frugality was the custom of the time, and he practised it faithfully in his own person and taught it to his family. Utterly averse to speculation, he was well content with a moderate and regular profit in his business transactions when he could obtain it.

How different the character and the career of Sir Richard Arkwright. The thirteenth child of a family steeped to the lips in poverty, he was turned into the world without education, which in after life he never found time to acquire. Trained to a servile handicraft, and without a shilling of capital, the position from which he raised his fortunes had not one of the advantages enjoyed by Crompton; but to compensate for this he possessed an indomitable energy of purpose which no obstacle could successfully oppose, a bronzed assurance that enabled him unabashed to meet and to thrust

^{102 (}Page 109.) Crompton was so exceedingly shy and sensitive that he has been known to return from Manchester without even attempting to transact business, because he observed himself to be pointed out to strangers as a remarkable man.

aside either circumstances or men when they stood in his way, an unscrupulous hand to grasp and appropriate the ideas and immatured inventions of others, a rude health that enabled him to work or travel when others slept, and an undaunted spirit for speculation, ¹⁰³ prepared to accept success or failure without any visible effect on his mind or temper. Thus their functions and career in life were singularly different, while both were benefactors to the human race.

103 "His speculative schemes were vast and daring * * * * * and from the extravagance of some of these designs his judicious friends were of opinion that if he had lived to put them in practice, he might have overset the whole fabric of his prosperity." — Baines's Cotton Manufacture, p. 196.

CHAPTER X.

Removal to King-street, Great Bolton. 1792, Fire-engines and Factories. 1793, Prosperity of the Muslin Weavers. Death of Mrs. Crompton. Samuel Crompton's belief in Spiritual Appearances. Joins the Swedenborgian Christians or New Jerusalem Church. Samuel Dawson. Benjamin Raynor. Rev. John Clowes. Unsuccessful Subscription in Manchester. Mr. Arkwright. Crompton takes part of a Mill. Sits for his Portrait. His Character and Appearance at this time.

After filling the office of overseer for the township of Sharples during the last year of his residence at Oldhams,¹⁰⁴ Mr. Crompton removed to Bolton in 1791, and occupied the house now No. 17, King-street,¹⁰⁵ as his dwel-

104 It was mainly his desire to avoid a re-appointment to this office, which he particularly disliked, that induced Crompton to leave his pretty and pleasant cottage at Oldhams. — Oral information from his son John to the author.

¹⁰⁵ King-street is now for the most part occupied by lodging-house keepers, and the houses have greatly deteriorated in appearance. Fifty years ago many highly respectable families resided in this street. The house in which Mr. Crompton dwelt was then rough-cast and

ling, with the attics over it and the two adjoining houses for manufacturing purposes. During the six following years his family was increased by the birth of four more sons, a circumstance which appears to have induced him to make fresh attempts to work his invention with profit, as we find that he filled the centre attic with preparatory machinery and that the others held two new mules. In working these he was now assisted by his two eldest boys. 106

The year 1792 must not be passed over without calling attention to the fact that at least

regularly whitewashed; now it shows the dingy and discoloured brick only. From a rate-book of the year 1793, "approved by the gentlemen committee" who at that time managed the affairs of the town, the attics were assessed at £2 18s., as "part of Crompton's," and the "house he lives in" at £8 8s. At this period the assessable value was taken at half the estimated rental of the property rated.

106 John, the only surviving son, now (1859) sixtyeight years of age, informed the author that his earliest recollections were, "being placed, when seven years of age, upon a stool to spread cotton upon a breaker preparatory to spinning, an elder brother turning the wheel to put the machine in motion." two steam, or, as they were then called, fire-engines were erected in Bolton: the first probably by Messrs. Peel, Ainsworth and Co. at the works now occupied by Messrs. T. R. Bridson and Sons; another a little lower down the brook was set up by Mr. George Grime; 107 and a third in connexion with their new factory by the Messrs. Carlile. All of these were upon the atmospheric principle, and their use was entirely a secondary one. They were not employed to turn machinery, the rotary motion not being then applied to them, but solely to pump back to a higher elevation the very inadequate supply of water afforded by the river

107 Messrs. Peel, Ainsworth and Company's works being situated in Little Bolton, no mention is made of their fire-engine in the Great Bolton rate-book of 1792. Those of Messrs. Carlile and Mr. George Grime are specified in the rate; and it may be that others are included without distinct mention, as in the case of Mr. Nathaniel Bolling for a "new factory, &c." Bolton and Glasgow adopted the steam-engine for purposes of cotton spinning in the same year 1792. Sir Richard Arkwright had employed it two years earlier; while the first steamengine in Manchester for the manufacture of cotton goods was erected for Mr. Drinkwater in 1789.

Croal that it might be worked over again in giving motion to the water-wheels. During this year also the word "factory" occurs almost for the first time in the rate-books of the township; but these buildings were invariably assessed at a lower rate than the public-houses and inns, which were still the most important business buildings in the town.¹⁰⁸

The year 1793 was one of unexampled prosperity, particularly to the muslin weavers of Bolton. Four guineas per piece of twenty-four yards, or three shillings and sixpence per yard,

108 In 1792 the Swan Inn was rated at £26, and the Horse Shoe Inn and Assembly Room at £33 7s.; while the new factory erected by Mr. Thomas Fogg was rated at £22, the new factory &c. of Mr. Nathaniel Bolling at £15, the new factory &c. of Mr. John Rushton £20, the new factory and fire-engine of Messrs. Carlile £12, and the new factory and fire-engine of Mr. George Grime £25.—From a rate-book for Great Bolton for the year 1792. In remarkable contrast with these, we append the rateable value of four cotton mills now in operation in Bolton (from information obligingly supplied by Mr. J. Seddon Scowcroft, assistant overseer). They are respectively: £2549 17s. 6d., £2117 12s. 6d., £1759 17s. 6d., and £1131 10s.

was then paid for weaving sixty reed six-quarter wide cambric muslin with one hundred and twenty picks to the inch.109 "The trade was that of a gentleman. They brought home their work in top boots and ruffled shirts, carried a cane, and in some instances took a coach."110 Many weavers at that time used to walk about the streets with a five pound Bank of England note spread out under their hat-bands, they would smoke none but long "churchwarden" pipes, and objected to the intrusion of any other handicraftsmen into their particular rooms in the public-houses which they frequented. This prosperity did not continue, and few operatives endured greater privations than the hand-loom weavers of Bolton for the succeeding fifty years. In 1797 the price for weaving twenty-four yards of six-quarter sixty reed cambric muslin fell to twenty-nine shillings, in 1807 to eighteen shillings, in 1817 to nine shillings, and in 1827, in

¹⁰⁹ The Minutes of the Evidence of Mr. John Makin (a much respected inhabitant of Bolton) before a select Committee of the House of Commons on hand-loom weavers in July 1834. p. 389.

¹¹⁰ Evidence of Mr. Makin, p. 418.

which year Samuel Crompton died, to six shillings and sixpence.¹¹¹

On the 29th of May, 1796, Samuel Crompton followed the body of his amiable wife to her grave in the parish church-yard. She had been long delicate, and had worked perhaps too hard in the cause of her numerous family. She left behind her eight children; and on the day of her funeral the two youngest lay sick in their cradles, — one of them expired within three months, the other survived his mother less than two years.

Crompton's peculiarly constituted mind was frequently acted upon by the influences of imagi-

moven for two shillings and twopence per piece of twenty-four yards; but this does not eause a corresponding depreciation in the condition of the operatives. Their labour is now assisted by improved mechanical appliances; food and clothing can be procured at greatly diminished cost; and even some of the minor luxuries of life, which fifty years ago were quite unobtainable by any hand-loom weaver, are now within the reach of those who are steady and industrious. Still it is to be regretted that the remuneration for their labour is hopelessly beneath that of most other operatives.

nation, which produced a marked effect upon his character. Among these was a firm belief in spiritual manifestations. He ever averred that on returning from her funeral, and when entering the door of his house in King-street, he was met by the figure or semblance of his late wife, who held out both her hands as if to welcome him home again. He used also to tell that when his wife was confined of his first son George at the Hall-in-the-Wood he hurried off on foot to Winwick to bring his mother-in-law to her assistance. When on this journey near Newton-le-Willows, walking on a piece of straight causewayed road, he saw in the bright moonlight a hare rapidly approaching directly in his path. It came close up, stopped and stared at him, then turned and ran swiftly back again in the direction of his journey. Samuel looked at his watch and marked the time. his return to the Hall-in-the-Wood he learned that at the moment when he met the hare his wife had very narrowly escaped death from some crisis in her illness, and he ever after asserted that the animal was specially sent to warn him of the necessity of speed on his journey.

Though he did not acknowledge any personal belief in witchcraft he used to narrate that the cows of his great grandfather, then resident at Firwood, were upon one occasion bewitched by a neighbour so that the milk and cream refused to yield butter to any amount of labour in churning. The family having tried every expedient to counteract the charm were astonished by the unexpected entrance of the suspected witch, who saluted the farmer with a smiling and simpering enquiry, "Well, neighbour, how does your churning speed?" Provoked beyond measure, the stalwart farmer, a man of gigantic size, seized a bill-hook and threatened to cleave her skull if she did not instantly commence churning herself and thus dissolve the spell. This she was compelled to do, when happily for the preservation of her life, but to the confirmation of her character of witch, the butter immediately made its appearance, influenced doubtless by some chemical change occurring at the moment which would have been similarly induced by any other hand, though Samuel Crompton's ancestor and his family thought otherwise.112

With a mind thus open to imaginary influences, and a temper smarting under a morbid feeling that he was unjustly subjected to such ills as Shakspere denominates

"—— the whips and scorns of time,
The oppressor's wrong, the proud man's contumely,

* * * * *

The insolence of office, and the spurns
That patient merit of the unworthy takes," 113

it is not greatly to be wondered at that Crompton shrunk from the public worship of God as then somewhat coldly conducted by the clergy of the Church of England, and embraced the religious tenets of the amiable and imaginative Emanuel Swedenborg, whose philanthropy and scientific attainments induced many to adopt the precepts

^{112 (}Page 119.) Brown's History of Bolton, p. 332. That author does not give the name of his informant; but Samuel Crompton is thus sufficiently indicated: "An individual, who beyond any other person has proved himself a benefactor to Lancashire, very gravely assured us a few days since," &c. &c. Brown was at that time on terms of personal intimacy with Crompton; and his introduction implies that Samuel himself had some belief in witchcraft, or at least that Brown thought so.

¹¹³ Hamlet. Act iii. sc. 1.

of his philosophy and religion. In Bolton he had numerous followers who were said to have been presided over by an influential clergyman from Manchester.¹¹⁴ The branch of the Swedenborg or New Jerusalem Church at that time worshipped in a building erected for the purpose in Little Bolton; but in consequence of inadequate funds it passed into the hands of the Rev. Mr. Bullock who used it as a schoolroom, permitting however the original owners to occupy it on Sundays for some years afterwards.

No doubt there were other influences at work to induce Crompton to leave the Church; and

114 The Rev. John Clowes, A.M., Rector of St. John's Church, Manchester, and formerly Fellow of Trinity College, Cambridge, died in 1831, aged eighty-eight. Notwithstanding some apparent inconsistencies, which we do not attempt to explain, this amiable elergyman was almost universally allowed to hold the character of "a scholar, a philosopher, a finished gentleman, a luminous writer, an impressive preacher and a practical Christian divine."—(Memoir of the Rev. John Clowes, p. 75.) When taking part in the services of the New Jerusalem Church in Bolton, Mr. Clowes did not occupy the pulpit, but always spoke from a pew among the congregation.

among these may be mentioned his intimate acquaintance with a popular though irregular surgeon and herbalist who at that time practised in Bolton, called Samuel Dawson; he was celebrated for a certain mystic poultice which he used to make and sell. Another Swedenborgian friend was a workman of his own, called Benjamin Raynor,115 a very humble and pious man, who had been a soldier and lived a great deal abroad, particularly in Canada, where he lost his toes by frost. Mr. Hodgson of Strangeways and the Rev. Mr. Clowes also frequently visited Crompton in King-street, when at Bolton for the purpose of making proselytes to their peculiar faith. But whatever the means used, there can be no doubt

¹¹⁵ Benjamin Raynor, during the latter part of his life, lived in a summer-house situated in a garden in Millwell Lane, leading out of Deansgate to the north, now covered by the New Market Hall, and occupied himself in weaving wire for riddles. When the author adverted to this worthy man in his public address to the mechanics of Bolton on the life of Crompton, Robert Heywood, Esq., J.P., one of the audience, stated that he remembered him well, and gladly bore testimony to the excellence of his character.

that he became a member of the New Jerusalem Church from a conviction of its truth, and a high appreciation of the characteristics of that unpretending and philanthropic body.

In 1800 some gentlemen of Manchester, sensible that Mr. Crompton had been ill-used and neglected, agreed without his previous knowledge to promote a subscription on such a scale as would result in a substantial reward for his labours, a provision for his family, and a sufficient security for his comfort during life. The principal promoters of this scheme were Mr. George Lee and Mr. Kennedy; they appear to have embarked in it with energy; and it is pleasant to know that his merits were acknowledged abroad, if, like other men of talents, he was less honoured than he should have been in his own locality.

We have been unable to meet with the names of the contributors to this fund, with one single exception; but it is one which it is satisfactory to mention. When Mr. Arkwright, the son and successor of Sir Richard, was waited upon by Mr. Lee, he said that he would contribute cheerfully, candidly acknowledging the merit of

the invention,—at the same time observing that "Mr. Crompton had been his most bitter rival, as he had superseded the machine of his father's invention in all the finer numbers of yarn."¹¹⁶ He contributed thirty guineas to the fund, and this was doubtless an entirely sufficient reason to induce the grateful Crompton to forgive and to forget Sir Richard Arkwright's surreptitious inspection of his mule at the Hall-in-the-Wood.

But this hopeful scheme, generous and noble in its intention, followed the usual course of Crompton's evil fortune. Before it could be carried out the country was suffering very severe distress from a failure in the crops and consequent high price of food, a lamentable war broke out, the horrors of the French revolution approached their crisis, trade was all but extinguished, — and the result was a sum quite inadequate to the proposed purpose or to his deserts. So great indeed was the difficulty of collecting the sums subscribed that the matter was of necessity prematurely abandoned. Between four and five hundred pounds was all

¹¹⁶ Evidence of Mr. George Lee before a Committee of the House of Commons, 18th March, 1812.

that could be realized, and that was handed over to enable Crompton to increase his little manufacturing establishment for spinning and weaving. As a consequence of his possession of this additional capital he soon afterwards rented the top story of a neighbouring factory, one of the oldest in Bolton, in which he had two mules—one of three hundred and sixty spindles, the other of two hundred and twenty—with the necessary preparatory machinery. The *power* to turn the machinery was rented with the premises. Here also he was assisted by the elder branches of his family; and it is our duty, though a melancholy one, to record that the

¹¹⁷ Mr. Kennedy's Brief Narrative.

¹¹⁸ From a return made to the magistrates, by the township constables, of the persons employed in cotton factories, dated 3rd of January, 1803, we learn that Samuel Crompton rented part of a factory from Joshua Wood and Co., employing three men, one woman, and six children, none of whom were apprentices. — From documents obligingly supplied by Thomas Holden, Esq. The female here referred to (Mrs. Carrodus) is still alive. She spun upon a very small loom; but from age and loss of memory is unable to furnish any particular information.

system of seducing his servants from his employment was still persisted in, and that one at least of his own sons was not able to withstand the specious and flattering inducements held out by wealthy opponents to leave his father's service and accept extravagant payment for a few weeks, during which he was expected to divulge his father's supposed secrets and his system of manipulating upon the machine.

About this time Mr. Crompton yielded to the solicitations of his friend Mr. Kennedy, and consented to sit for his portrait to Mr. Allingham, a London artist of some celebrity. This portrait is in the possession of Mrs. Kennedy, who justly values it highly. We venture to express a hope that at some future though far distant day it may become the property of the nation, and find its fitting place in that gallery of the portraits of eminent men which Government is now endeavouring to collect.¹¹⁹

¹¹⁹ Excellent copies have been taken of this portrait. One, the property of Samuel Crompton, Esq., of Cavendish Place, Manchester, was through the kindness of that gentleman exhibited to the mechanics of Bolton on the evening on which the author read his second paper on the Life of Crompton.

Crompton has been described by his sons and others, who knew him when in the strength and beauty of manhood, as a singularly handsome and prepossessing man; all his limbs, and particularly his hands, were elegantly formed, and possessed great muscular power. 120 Though unpolished in his language, his manners and motions were at all times guided by a natural politeness and grace equally removed from rudeness and servility. Quiet and unpretending, he was nevertheless always upheld in whatever society he might be thrown by a spirit of independence, which insured to him (except from the most ignorant and presumptuous) the respectful attention to which he was himself so well entitled and which he never failed to pay to others. These characteristics are strongly expressed in his portrait, in which there is no mistaking all the consistent attributes of a person who was emphatically one of Nature's gen-

^{120 &}quot;He could easily lift a sack of flour by the head and tail, and pitch it over the side of a eart." Information from Mr. Robert Rushton, of Little Bolton (aged seventy-four), who has frequently seen him perform this feat.

themen. The mild, musing and deeply reflective character it exhibits is a faithful representation not merely of the outward man, but also strongly expresses the intellectual character of his mind and disposition, confirmed by the force of his deep-set eyes, always a sure mark of inventive genius. Such was Samuel Crompton's character and personal appearance at this period of his life, when in full possession of health of brain and body. We trust that we have in no respect exaggerated in our description; but should our readers suppose so, we confidently appeal to the portrait as affording a striking, almost a speaking, confirmation of the truth of these remarks.

CHAPTER XI.

Economy of Crompton's Household Arrangements. Oatmeal Jannock. Consumption of Sugar. Change of Food caused by
the modern Factory System. Crompton's Religious Life.
Family Worship and admirable reading of the Holy Scriptures.
Lends Money to build the New Jerusalem Church. Becomes
Choir Master. Builds an Organ. Presented with a Silver
Cup by the Choir. Composes Hymn Tunes. Their Titles.
His own Voice. Washing Machines.

The money derived from the Manchester subscription did not in any way alter the arrangement of Mr. Crompton's frugal household in King-street. His children were brought up on a system of strict economy, one staple article of food being oatmeal, which, either cooked as porridge or baked into that very questionable quality of bread called jannock (a term adopted ironically it must be supposed as a Bolton byword for everything more than usually honest and excellent), was almost universally eaten by the working men of that period. It may be mentioned by way of parenthesis that we can hear of only one jannock-baker now practising

his art in Bolton, and further, that the formerly much-prized oatmeal is so far supplanted by other articles of food that for every pound of it now used in that town, there is a consumption of at least three pounds of sugar, — a singular instance of the change of custom brought about in a comparatively short time, a change too which may be fairly attributed to the subject of our memoir; for, as Crompton's mule mainly induced the formation of the Factory System, so did the success of that system bring about a change of food better adapted to the requirements of its workers.

Though Crompton's invention greatly contributed to the formation of the factory system as now established, that system was however more directly and immediately induced by the contrivances and combinations of Sir Richard Arkwright, whose machinery demanded the investment of large capital, and could only be carried on with success in buildings especially adapted for the purpose, depending as it did for its motive power on the water-wheel, and even then enabled to spin only the coarser qualities of yarn. The mule, on the contrary, was suited

to produce yarns of any range of quality, whether for warp or weft. Its comparatively small cost made it accessible to persons of very moderate capital, while its compact form and inconsiderable weight enabled it to be worked by the human hand in a moderate sized room of an ordinary dwelling-house. For these reasons it was for many years rather a domestic implement than a portion of the great modern factory system. The fact also of its never having been tied up by patent or monopoly rapidly led to its general use. Many industrious men commenced business with a single mule worked by their own hands, who as their means increased added to their machinery, and progressively extended their business until they rose to honourable eminence as the most useful and extensive manufacturers in the kingdom. Crompton himself disliked the factory system; but he did not live to see its development in the lofty rooms of modern mills kept scrupulously clean, in which a single spinner watches the fairy-like work of mules bearing from one to four thousand spindles, moving with marvellous precision and with a celerity and silence which appears the work of enchantment.

At this period of his life, and probably for a considerable time afterwards, it was Samuel Crompton's custom to conduct family worship in his house with great regularity, an evidence in favour of his personal piety which we feel bound to mention. His descendants and friends have a pleasing recollection of the impressive and devotional manner in which he was accustomed to read aloud the Holy Scriptures. It would appear that he did not at this time require the whole of the money arising from the Manchester subscription as capital in his business, as we find that in 1803 he supplied £100, being the fourth part of a sum raised to build a place of worship for the religious body with which he had connected himself in Bury-street, Little Bolton. He received interest for this money for several years, and appears to have taken considerable interest in the progress of the building, which was of two stories; the upper chamber being used by the congregation, while the rooms below were occupied by his friend Samuel Dawson, who had then become the leader of their religious services, in recompense for which his house was held free of rent.

Mr. Dawson still continued to practise surgery and to sell his herbal and pharmaceutical preparations.¹²¹

About this time Mr. Crompton, aided by his eldest son George, built a chamber organ in his house in King-street. It is said that he refused an offer of £100 for it, though that information cannot be relied upon. Several years afterwards this organ passed from Mr. Crompton's hands into those of the late Mr. William Tickle of Bolton, who sold it to (or more probably

121 Mr. Samuel Dawson died in this house on the 11th of March, 1823, aged seventy-nine years, and was interred in the parish church-yard of Prestwich. a native of Middleton, and had conducted the religious services of the New Jerusalem Church in Bolton for upwards of thirty years. Mr. Dawson was much respected, and many people relied with implicit faith on his medical prescriptions. The (assumed) secret of his famous poultice remains with his descendants, and the poultice is still extensively used in Bolton. It is worthy of notice that the public worship of this most respectable religious body is now (1859) conducted by a medical gentleman, Joseph W. Haddock Esq. M.D., author of "Somnolism and Psychism, or the Science of the Soul and the Phenomena of Nervation as revealed by Vital Magnetism or Mesmerism." Hodson, London 1851.

purchased it for) the congregation of the New Jerusalem Church, where it was used until the year 1846, when the services were removed to the building in Higher Bridge-street, now occupied by the followers of Emanuel Swedenborg. The organ was then sold to Mr. Walmesley, sizer, of Spaw-lane, who removed it to Heaton Norris, near Stockport, when he went to reside It has since passed into the hands of Mr. Thomas Robinson of Failsworth, and is, we learn, intended to be placed in the New Jerusalem Church of that township. 122 The organ, since its removal from Bolton, has undergone several alterations which materially diminish its value as a relic of the original maker. When used by Crompton it contained principal stop, diapason, fifteenth, and dulciana, and its tone was then very sweet though not powerful.

Mr. Crompton took the entire charge of the

¹²² Information obligingly contributed by Mr. J. Pickering of Little Bolton. The author had been previously informed that the organ was used in a public-house at Hollinwood for the amusement of the customers. While gratified to know that it is to be employed in holy services, it is still a subject of some regret that the instrument should have been removed from Bolton.

psalmody in the church, and practised the little choir on Sunday evenings at his house in Kingstreet, at first with the organ, on which he played himself. After its removal a piano took its place, upon which he and his two eldest sons were accustomed to play, though the youths took no part in the performances of the In the course of his duties as honorary choir master he prepared the manuscript music books for the singers, and some of these books have happily been preserved. 123 are objects of curiosity from being copied, or as he called it "pricked," with his own hand; and in some of them alterations have been made in the arrangements. It is very interesting to know that the books contain several hymn tunes of his original composition, which we are told by musicians have considerable merit, and appear to be the work of a skilful practical artist as well as a scientific musician.

¹²³ Two of these music books, the property of Mr. Seddon of Little Bolton, were exhibited to the members of the Bolton Mechanics' Institution when the author read his second Paper on the "Life and Times of Samuel Crompton."

It was Mr. Crompton's hospitable custom to entertain the choir with tea on their practice nights. The members greatly enjoyed these meetings, and gave a practical and pleasant proof of their satisfaction and of the esteem in which they held their leader, by subscribing among themselves for a silver cup which was presented to him, though at what particular date we have failed to ascertain. Thus much however we learn from the information of one who was present at the presentation (and whose words we use): "The cup was filled with wine and they had a gradely comfortable stir over it." Upon this cup, besides an inscription there was an engraved portrait of Mr. Crompton, who after the presentation, with the assistance of a pentagraph which he made for the purpose, added the profiles of all the members of the choir. It must have been an object of much interest, and could it now be procured would be an invaluable relic. It has been anxiously enquired after in the hope of its recovery, but without success; and from the locality in which it was last seen there is reason to fear that it has long ago been consigned to the melting pot.

The names of some of the hymn tunes which appear to have been composed by Crompton are of local interest and deserve a moment's notice. Among them we find one entitled "Conjugal Love"124 with the date "1806," which was the tenth year after the loss of his excellent wife; "Bury-street" (the locality of the New Jerusalem Church, which he assisted in erecting); "King-street" (where he then resided). "Mary's Joy" and "Martha's Comfort" might have been supposed to refer to the sisters in the New Testament, were they not followed by "Ellen's Delight," for which no Scripture reference can be found. On enquiry, we discovered that these tunes derived their names from three favourite treble singers 125 in the choir with whose general conduct and musical attainments Crompton had reason to be well pleased. "Eliza," "Happy we," "Minstrels,"

^{124 &}quot;Conjugal Love" is the title of one of Swedenborg's most celebrated works.

¹²⁵ These young ladies were Mary Grundy, who afterwards removed to Tyldesley and was resident there in 1853; Martha Sharples; and Ellen Roscoe of Tonge Fold

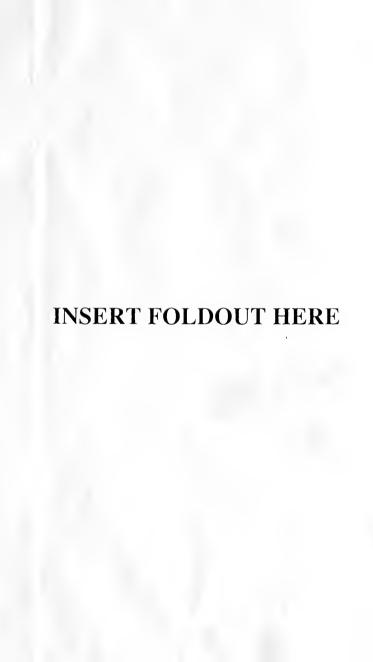
and "Generous fair" 126 refer to the choir as a body, or to individual members. "The Orphan's Prayer" was doubtless inspired by the remembrance of his motherless children; and "Jubilee" is an effusion of loyalty on the occasion of King George the Third entering into the fiftieth year of his reign. Other hymn tunes known to have been composed by Crompton are:

Meditation, Whitfield,
Philanthropy, Jerusalem,
Stranger, 127 Complaint,
Glorification, Advent,
Contemplation, Proclamation,
Julius, Forty-ninth Hymn,

Anonymous.

126 "Eliza" and "Generous fair" refer to the same person, a sister of Mary Grundy, also a member of the choir.

127 A fac-simile of this hymn tune, "pricked" by Mr. Crompton, gives a fair idea of the contents of the music books. Two or three tunes appear to have been contributed by his musical friend, Edward Harwood, composer of "Vital Spark," &c. &c. The information respecting Crompton's music has been obligingly supplied by Mr. Robert Rushton (now seventy-four years of age), who





Mr. Crompton's voice was a tenor of much sweetness but of no great power. His connexion with the choir of the New Jerusalem Church was maintained until the year 1823, when it was broken off in consequence of a personal misunderstanding between him and the officiating minister.¹²⁸

Crompton's philanthropy was evinced about this time by many little thoughtful contrivances and inventions to abridge or assist in the labours of domestic life, particularly those of women and children. Among these was an adaptation of bleachers' bowls or squeezers to the uses of the laundry. He made several of these useful instruments with his own hands and gave them to his female friends, while others were sold to strangers; thus anticipating

from his early youth was a member of the choir of the New Jerusalem Church, and succeeded Mr. Crompton as choir master. Mr. Rushton is still an honorary member of that body, and takes much interest in its success.

¹²⁸ It has been said that the minister of that time imagined the congregation to be more attracted to the services of the church by Crompton's efficient and well-trained choir than by the force and eloquence of his own prelections.

to some extent and for some processes the washing machines now used so generally for domestic purposes. His bowls or squeezers were not turned by a handle as at present, but by arms or levers in the same way as the printing presses of that period were worked.¹²⁹

129 Information from Mr. Almond, of the firm of Almond and Norris, Bolton. One of Crompton's squeezing machines was sold by auction not long ago in Bolton, and purchased by a person who has a kindly regard for the memory of the maker.

CHAPTER XII.

Popularity of Sir Joseph Banks. Crompton applies to him. Erroneous address, and its unfortunate consequence. Society of Arts. Rewards offered for Improvements in Spinning. Crompton's case considered in 1807. Minutes of the Society on the subject, re-considered in 1811, and ordered to be "laid aside."

Among the eminent men in England at the commencement of the present century, Sir Joseph Banks occupied a very conspicuous position. He had obtained a distinguished character as a philosopher, was possessed of an ample fortune, occupied a prominent place in social as well as scientific society, and from his personal intimacy with King George the Third his patronage was reputed to be all powerful. So at least thought Samuel Crompton, and in the hope of obtaining a share of this patronage, to which he felt himself every way well entitled, he, on the 30th October 1807, addressed a long letter to the scientific baronet, giving an artless and unstudied recital of the grievances to which he had been subjected, and showing modestly

but clearly the advantages which the nation had derived from his invention. Crompton hoped that through this letter Sir Joseph might be induced to take an interest in his case, and either mention him favourably to the king and the ministers or inform him "if he knew any mode of preventing imposition for the future, and obtaining remuneration for the past." The letter appears to have been unaccompanied by introduction, or testimonials of any kind; and when it is remembered that Sir Joseph Banks had devoted his mind and his time to the study of natural science, and not to the mechanical arts, it is no great wonder that the letter failed to excite in him the interest which the writer expected, even if it was opened and read, which in all probability it was not. At all events Crompton received no direct reply, and it is certain that he felt this apparent neglect as another injustice added to the accumulation of injuries which he now appeared to think inevitably attendant on every attempt he made to improve his position in life. By an unfortunate error Mr Crompton addressed his letter to "Sir Joseph Banks, Bart., President of the Society of Arts,

London." Now, with this Society the baronet had no connection, official or otherwise, not being even a member of it. He in all probability naturally and properly transmitted the unopened letter to the quarter for which he supposed it to be intended, and very likely thought no more of it. This arrangement sufficiently explains the circumstance of Crompton's having no reply from Sir Joseph Banks, who, so far as we can now learn, was unacquainted with the contents of the letter, or the name of its author. Mr. Crompton's mistake can be readily enough accounted for. He seems to have confounded the Society of Arts with the Royal Society, or supposed these to be different names for the same institution, a mistake by no means unlikely to "a retired man in the country unacquainted with public matters," as he described himself to be in the letter in question; and as Sir Joseph was at that time President of the Royal Society of London, he would, as a matter of course, carefully abstain from opening a letter officially addressed to the "Society of Arts," although it (erroneously) bore his name as president.

The Society of Arts was founded in the year 1753 (being the same in which our hero was born) for the express purpose of the "encouragement of arts, manufactures and commerce." Committees are selected from the members at large, whose special business it is to consider the various communications received, with a view to recommending their adoption or rejection by the Society. In cases of approval, the committee also recommend to whom awards should be given, their amount in certain cases, and whether they should be pecuniary or honorary. 130 One of these committees takes cognizance of all mechanical inventions and discoveries submitted to the Society. So early as the year 1761, the attention of the Society of Arts was directed to the subject of improved machinery for spinning, and the following extracts from the Minutes of Transactions in the years 1762 and 1763 show the steps taken to promote that end¹³¹: — "The

¹³⁰ The Learned Societies and Printing Clubs of the Kingdom, by the Rev. A. Hume, LL.D., F.S.A., &c., p. 98.

¹³¹ Printed Minutes of Committees of the Society of Arts, 1762, 1763, p. 112, quoted in Brown's pamphlet on the claims of Crompton, p. 20.

Society having been informed that our manufacturers of woollen, linen and cotton find it exceedingly difficult when the spinners are out at harvest work to procure a sufficient number of hands to keep their weavers, &c., employed; and that for want of proper dispatch in this branch of our manufacture the merchants' orders for all sorts of piece goods are often greatly retarded, to the prejudice of the manufacturer, merchant, and nation in general. The Society therefore concluded, that an improvement of the spinning-wheel would be an object worthy of their notice. Accordingly they published the following advertisement, March 16, 1761, -'For the best invention of a machine that will spin six threads of wool, flax, hemp or cotton, at one time, and that will require but one person to work and attend it (cheapness and simplicity in the construction will be considered part of its merit); for the best, fifty pounds; for the second best, twenty-five pounds.'

"In consequence of these premiums, several ingenious improvements have been made to the spinning-wheel; but as none of them effectually answered the purpose intended, the premiums

were continued, and a machine for spinning six threads was produced by Mr. George Buckley, and examined by the committee of manufacturers, February 28th, 1763." These extracts

132 Quoted from Brown's pamphlet in support of Crompton's claims, pp. 20, 22. Buckley's machine is the first recorded as spinning more than one thread. Highs, in his evidence against Sir Richard Arkwright's patents in 1785, acknowledged that in his experiments to spin with rollers he "used but two spindles." - Guest's Compendious History of the Cotton Trade, p. 60. In Lewis Paul's patents for spinning by rollers in 1738 and 1758, not a word is said of the "machine or engine" spinning more than one thread at a time. It was simply a modification of the old wheel, in which the human fingers were superseded by sets of rollers. In addition to this arrangement, however, fifty of these wheels (each with its single spindle) were connected together in a frame, and motion given to them simultaneously, at first by a couple of asses, and ultimately by a water-wheel. In one sense, therefore, Paul's frames produced fifty threads, though each thread was spun on a separate wheel and spindle. John Wyatt mentions varn spun without hands, and his son, Mr. Charles Wyatt, in a letter published in the Repertory of Arts, Manufactures and Agriculture for January 1818, claims for his father the merit of spinning "the first thread of cotton ever produced without the intervention of the human fingers;" but neither of these gentlemen

show clearly that the consideration of Mr. Crompton's application came within the legitimate scope of the Society's operation, which was to foster and encourage mechanical invention by offers of reward, and advice.

The Society of Arts appears to have lost no time in taking Mr. Crompton's communication into consideration. That document was dated 5th November 1807, and the "minutes" show that on

"November 11th, 1807 — (General Meeting of the Society) — A letter from Samuel Cromp-

advance any claim to the higher merit of spinning numerous threads on one wheel. We offer this opinion with some diffidence, but it appears the only mode of reconciling this manifest anomaly; if Paul's machine really spun fifty threads at once between the years 1738 and 1764, he or the conductors of the most popular magazine of the period, with whom he was then associated in the business, must have known that at the very same time the Society of Arts, year after year, offered a reward for the invention of a machine to spin six threads at once. Why then did not Paul or his friends claim this reward? There was no motive for secrecy, as the machine was patented. Yet no such claim appears to have been made, and in 1763 the society rewarded Mr. G. Buckley for his six-thread machine.

ton on improvements in spinning and weaving was read, and referred to the Committee of Mechanics."

"December 17th, 1807 — (Meeting of Committee of Mechanics), - Took into consideration a reference to this committee of November 11th on various improvements in spinning and weaving."—"Read letter from Mr. Samuel Crompton, dated Bolton November 5th, 1807, stating that at the time he was about twentytwo years of age, spinning jennies for cotton weft were first invented, but that such spinning was not proper for warps; that he then lived at a large house called Hall-o'th'-Wood, where, by dint of great application and care, he invented the first Mule machine for spinning cotton yarn of a superior quality about the year 1780; that in the latter end of that year, in consequence of the request of many spinners, he opened a subscription for the disclosure of his inventions, but was deceived by the persons who promised him encouragement, the only advantage he had being money sufficient to make a new Mule of fifty-two spindles, whereas his old one had only forty-eight spindles; that

the persons he taught to spin were constantly enticed from his service, and his improvements stolen from him; and he has been frustrated in the expectations be flattered himself with from his invention. That he has lately invented a loom of a curious construction, in which he weaves an article that other weavers cannot execute, which stimulates the master manufacturers and weavers to endeavour, by all unfair means, to get acquainted with his machinery; that he is anxious to get that advantage from the public he thinks himself entitled to; and being a retired man in the country, and unacquainted with public matters, he requests the Society's advice to enable him to procure from Government or elsewhere a proper recompense for his invention." - "Resolved, to recommend to the Society that Mr. Crompton's letter be answered by the secretary."

And on "23rd December 1807, at a general meeting of the Society, reports from the Committee of Mechanics on (amongst other communications) Mr. Samuel Crompton's machines for spinning and weaving were read and agreed to."

No records exist of the correspondence by the secretary of the Society of Arts at this period; and though it must be presumed that Dr. Taylor answered Mr. Crompton's letter, from some unascertained cause that answer did not reach its destination, 133 nor did Crompton know that his application had ever been entertained by the Society until nearly four years afterwards.

The next reference to Crompton's affairs on the books of the Society of Arts is a minute dated "March 14th, 1811," when the "committee of mechanics took into consideration a reference to this committee of November 11th, 1807, on improvements in spinning and weaving."—"Read letter from Mr. Samuel Crompton, dated Bolton November 5, 1807, stating that he had taken great pains to improve the cotton manufacture, and that he is the inventor of the spinning machines called Mules, which he first commenced at a house called Hall-o'th'-Wood, near Bolton, about

¹³³ It is not improbable that the secretary may have transmitted his reply to Crompton's memorial through the medium of Sir Joseph Banks. This, however, is mere conjecture.

twenty-six years ago, and from which machines all the present machines for spinning under that name are formed; that he has since invented some great improvements in weaving, but that all his inventions have been pirated from him, and carried on by other persons; and he therefore wishes that some recompense, either pecuniary or honorary, may be made to him for the great pains he has taken, and the advantages the public have received from them."—"Resolved: It appears to this committee, on the perusal of Mr. Crompton's letter addressed to the ROYAL SOCIETY, 134 that its object does not come within the views of this Society; and they therefore recommend that it be laid aside."

On "March 27th, 1811," at a general meeting of the Society of Arts, "reports from the committee of mechanics on Mr. Samuel Crompton's spinning machine (and others therein named) were read and agreed to." ¹³⁵

¹³⁴ Not "Society of Arts," as erroneously stated in Brown's pamphlet in favour of Crompton's claim, p. 20. 135 We are indebted to the courtesy of the present secretary of the Society of Arts, P. le Neve Foster, Esq., for the copious extracts from the Society's *Transactions* given above.

A formal notification of the recommendation of the Sub-Committee of Mechanics that his letter be "laid aside," and the adoption of that recommendation by the general meeting of the Society of Arts, made to Samuel Crompton by Dr. Taylor, the secretary, appears to have drawn from him, while smarting under the erroneous impression that his letter had been effectually laid aside for nearly four years, a somewhat indignant letter of remonstrance and inquiry, to which he received a very curt reply by return of post in these words: "Your former letter was sent here by Sir Joseph Banks, as a matter which he thought neither concerned 136 him, nor the Society of Arts. The funds of our Society are small, and supported by private subscription only. We cannot afford to give large rewards."137

We have given these extracts from the minutes of the Society of Arts in full, notwith-

¹³⁶ The mistake in the name of the Society is repeated here. Crompton's letter did *not* concern the ROYAL SOCIETY.

¹³⁷ Brown's pamphlet in favour of Crompton's claims,p. 19.

standing some tiresome repetition, because they have been misquoted both in dates and details by Mr. Crompton's unfortunate friend Brown who erroneously imputes to Sir Joseph Banks and the Society of Arts a disregard of Mr. Crompton's application, and a want of ordinary good feeling, which after careful inquiry and investigation we do not hesitate to say arose entirely from the unfortunate error in the address of the letter to Sir Joseph Banks. Even so late as the year 1826, when Brown printed his pamphlet in favour of Crompton's claims for a second parliamentary grant, the error had not been discovered.¹³⁸ It is to be regretted that Mr. Crompton died without discovering the mistake, and its unfortunate consequences. Why the subject, after having been considered and apparently disposed of by the Society of Arts in 1807, should have been again taken up in 1811, and then formally "laid aside," is a question which cannot at present be satisfactorily answered. There can, however, be no doubt that it was unreasonable to expect a pe-

¹³⁸ Brown's pamphlet in favour of Crompton's claims, p. 18.

cuniary reward for an invention which had been in established use for upwards of a quarter of a century, from a society of gentlemen whose especial duty was to foster and encourage new discoveries in art and science. It is, however, much to be regretted, that the official communication of the result of the committee's deliberation, should have been couched in language which (though formally correct), was unaccompanied by a single word of ordinary courtesy, or any recognition of the eminent services of the disappointed and unfortunate applicant. A few lines explaining the duties of the Society of Arts, and pointing out the circumstances which precluded that body from rewarding the authors of old inventions, however meritorious, might have saved Crompton's morbidly sensitive mind from an additional grievance, which, in the absence of any such explanation, he looked upon as an insult,—another stone, and a heavy one, deliberately cast upon the cairn, which was fast becoming, in his estimation, a monument of national injustice and private misfortune.

CHAPTER XIII.

Crompton's Domestic Affairs. Position of his Sons. Anxiety about their Settlement in Life. His Daughter. He visits the Manufacturing Districts of Scotland and Ireland. Evades a complimentary Public Dinner at Glasgow. Statistics. The results of his Invention in 1811.

During the year 1807 our hero acutely felt the loss of his wife in the control of his domestic arrangements. Three sons, now arrived at manhood, had been taught by their companions, as well as by their own ambitious fancies, to consider themselves gentlemen of some consequence, or at least, that they were certain to become possessors of great wealth—the future, though deferred, fruit of their father's great invention. Under such circumstances, the judicious and gentle counsels of a mother were particularly required, and would in all human probability have guided them into the paths of prudence and propriety which they neglected to follow under the sterner admonitions of a father. Let it not be supposed however that

they were guilty of any serious derelictions of duty; all that can be said against any of them is, that they scattered abroad their allotted portions of wild oats with liberal hands, and enjoyed such of the pleasures of life as came within their reach with the incautious but hearty relish of hopeful youth. They were exposed to more than usual temptations, for a strong faith in their future high fortunes was confidently entertained by the inhabitants of Bolton of all classes; and being handsome young men, of gentlemanly manners and good education, they had no lack of flattering, and perhaps in some instances dangerous, companions. George, the eldest, was a captain and William a lieutenant in the local regiment of Volunteers and afterwards in the Militia. Their society was courted by many of the best and oldest families of the town and neighbourhood; and when George subsequently accompanied his father to London for a few weeks in 1812, he associated with many of the younger members of parliament and nobility connected with Lancashire, who interested themselves in his father's affairs. The two elder sons now attended the

Manchester market and took a portion of their father's work in the management of the factory, but it cannot be said that they in any degree increased the profits of his business. The want of a mother's guidance was most severely felt in the case of his only daughter. She was an interesting and sprightly child of sixteen, when a heartless and mercenary housekeeper to whom Crompton had entrusted the charge of his domestic affairs, believing that she must ultimately become very wealthy, led her into a private marriage with a most unworthy connexion of her own, and thus for ever blasted the prospects of the poor deceived girl. This marriage, as might be expected, proved a most unhappy one, and its victim became the slave to intemperate habits, too often the result of such connexions. A brief widowhood, and a second marriage scarcely more discreet than the first, did not in any degree retrieve her position. A fourth son, a bold youth of adventurous spirit, went off to sea in consequence of some trifling family misunderstanding, and remained absent for several years; while the youngest boy, of gentle manners and amiable disposition, having obtained part of his education at a boarding school, now attended to business at home.

Such was the condition of Samuel Crompton's family until 1811 or 1812. He could not help looking with anxiety to the fact that five sons, all approaching manhood, would soon expect to be established in business, while he could not command the capital necessary to insure the probability of their success. He was in easy circumstances, and had even lent a few hundred pounds; but this is to be accounted for by his economy in living, and as in no degree resulting from extended trade or accumulated profits. His means were sufficient for himself, but could not satisfy the expectations of his family. Looking about him, he saw the stream of manufacturing prosperity which he had started as a very small rill at the Hall-inthe-Wood some thirty years before, now sweep. ing along like a great river, carrying wealth and prosperity to the mansions of all who dwelt upon its banks, but ever passing his humble dwelling without leaving there any portion, however small, of these abundant riches.

We must not say that this made him envious, but assuredly he felt it to be an undeserved hardship; and it occurred to him, and to others also about the same time, that some share of this enormous wealth should in strict justice be intercepted in its passage, and placed at the door of him who had originated the mighty stream upon which it was borne along.

It was in the hope of some such measure, although at that time quite undefined, that Crompton commenced in the autumn of the year 1811 a statistical investigation into the results of his invention. For this purpose he visited the manufacturing districts of England, Scotland and Ireland, and from the information obtained he calculated that between four and five millions of mule spindles were then in actual use. But this estimate was afterwards found to be much too low. It referred to three hundred and sixty factories only, and did not include any of the numerous mules used in the manufacture of woollen yarn.¹³⁹

139 That they were extensively used for this purpose so early as 1812 is shown by the following extract of a letter addressed to Mr. George Crompton, dated Sowerby

There is some difficulty in fully appreciating the value of very high numbers by persons unaccustomed to their use; we therefore venture to suggest a familiar standard of measurement, to assist such of our readers as may be so placed, and assume that the Old Testament is made up of 2,728,100 letters. Now the number of mule spindles which Mr. Crompton

Bridge, March 13th, 1812: "Mules are used in several parts of Yorkshire and in Lancashire for spinning woollen yarn, and to good advantage; when there is a revival of trade they will be generally adopted, as they greatly facilitate the woollen manufacture.

[Signed] Jonathan Bottomley."

140 Millions! It would take a man three weeks to count one million sovereigns if he worked ten hours a day. Allowing a space of one and three quarter inches between the spindles, it would require a beam about sixty miles long to carry the mule spindles employed to spin cotton yarns in these kingdoms. We can only imagine, then, how long that beam must be, which, in addition, should carry all the spindles employed in mules in the woollen manufacture, and all the spindles working on Crompton's principle in the cotton and woollen manufactures of other nations. In the year 1850 the number of Crompton's mule frames at works in France amounted to 115,157, carrying probably 3,000,000 spindles.

found to be in use in the latter part of the year 1811 amounted to upwards of three-fourths more than the number of letters in the Bible, or to 4,600,000.¹⁴¹ It was further found that about forty millions of pounds of cotton wool was spun upon these mules annually; ¹⁴² that double the amount of wages was paid for spinning on the mule to that of all other machines for the purpose put together; ¹⁴³ that about two-thirds of the entire amount of steam power employed in cotton spinning was then applied to turning Crompton's mule spindles; ¹⁴⁴ that at least four-fifths of the

¹⁴¹ At this time the number of spindles used upon Hargreaves's jenny machines was 155,880; upon Arkwright's water-frames, 310,516; upon Crompton's mules, 4,600,000. — Extract from a MS. document circulated by Mr. Crompton in the year 1810, printed in Brown's pamphlet, p. 21.

¹⁴² Evidence of Mr. George Lee, of the firm of Philips and Lee, of Manchester, before a committee of the House of Commons, on the 18th March 1812.

¹⁴³ Ibid.

¹⁴⁴ Evidence of Mr. James Watt, of the firm of Boulton, Watt and Company, of Birmingham, to the same committee.

cotton cloth bleached in the principal bleachworks in Lancashire was woven from yarn spun on mules;145 that the value of buildings, power and machinery engaged in spinning on Mr. Crompton's system was between three and four millions sterling; 146 that 70,000 persons were directly employed in spinning on mules, 150,000 more in weaving the yarn thus spun, and at the usual computation of two others dependent on each worker, the aggregate number of people depending on the mule for their living amounted to 660,000 people, without including the large addition of those who were engaged in making machinery, growing cotton, transporting it, dyeing, printing, embroidering, exporting and selling.147

During his journeys to collect this information Mr. Crompton met with much gratifying attention from spinners and manufacturers in all quarters. Those of Glasgow in particular, desiring to do him public honour, arranged to

¹⁴⁵ Evidence of Mr. Joseph Ridgway before the same committee.

¹⁴⁶ Evidence of Mr. Lee.

¹⁴⁷ Evidence of Mr. Thomas Ainsworth.

receive him at a complimentary dinner; but when the time came our hero's courage was unable to carry him through so formidable an ordeal, and to use his own words, "rather than face up, I first hid myself, and then fairly bolted from the city." 148

On returning home, he laid the data he had collected before his kind Manchester friends, Mr. Lee and Mr. Kennedy, with the suggestion that Parliament might, perhaps, be induced to grant him some reward similar to that which had been voted in the previous year to the Rev. Edmund Cartwright for his invention of the power-loom, though that machine had as yet conferred but a very slight benefit on the trade

¹⁴⁸ Another anecdote illustrative of Mr. Crompton's extreme modesty and shyness may be mentioned on the authority of his sons. Mr. Kennedy called upon him one day in King-street, accompanied by a foreign Count, who much desired to be introduced to him; but Crompton was laid down in bed, and could not see him. Mr. Kennedy went up stairs, and said that if he did not get up and come down stairs his friend should visit him in his bed-room; but Crompton could not be persuaded. He declared emphatically that if the Count was brought up he would get under the bed.

of the country. These gentlemen entered warmly and energetically into this proposal, and introduced Crompton to the late George Duckworth, Esq., 149 who also took a lively in-

149 Mr. Duckworth was a much respected solicitor in Manchester. That this generosity to Crompton was not an isolated instance of his benevolent kindness may be gathered from the following anecdote: - When Radcliffe, the great improver of the power-loom, was a bankrupt, Mr. Brandt and Mr. William Jones (a banker) and two other friends advanced him each £500 to begin business again. "The loan being completed, Mr. Brandt and Mr. Jones called on the late Mr. Duckworth to give him instructions for the necessary bonds. In due time Mr. Brandt informed me that they were ready, and that I might call on Messrs. Duckworth, Chippendal and Co., to sign them. I give these minutiæ of the transaction in order that I may record also the liberality of the late Mr. Duckworth on that occasion. When I had signed the bonds. I asked that gentleman (to whom I was a perfect stranger) how much I was indebted to him? Before he replied he asked one of the clerks the amount of the stamps, which being given, Mr. D. said that was the sum I had to pay. I, of course, rejoined 'But what am I indebted to you for consultations, drafts, engrossing. &c.?' to which Mr. D. replied 'Nothing! I consider myself handsomely rewarded by the pleasure I have had in making out the bonds and papers, for this is the most

up gratuitously a memorial to Parliament in his behalf. To this memorial was appended the following general certificate, signed by numerous influential gentlemen and many manufacturing and machine-making firms:—
"We, the undersigned, being interested in the cotton manufacture, certify that we are perfectly satisfied with the correctness of the contents of the memorial prefixed, and are convinced of Mr. Samuel Crompton's just claim to public remuneration for the originality, utility and extent of his improvements in cotton spinning." ¹⁵⁰

generous and liberal transaction that has come before me since I was in business.'"— William Radcliffe's Struggles through Life, p. 47, 1828.

¹⁵⁰ See Appendix No. V.

CHAPTER XIV.

Samuel Crompton visits London. Is favourably received by the Chancellor of the Exchequer, Lord Stanley and John Blackburne, Esq., M.P. Petition presented to Parliament; referred to a Committee; its Report. Assassination of Mr. Perceval; consequent delay in Crompton's business. Insurrectionary outrages in Lancashire and Yorkshire. Burning of West-Houghton Factory. Petition to the House of Commons from inhabitants of Bolton. Five Thousand Pounds awarded to Crompton.

Armed with the memorial drawn up by Mr. Duckworth, and several valuable letters of introduction, including one to John Blackburne, Esq., one of the members for the county, Mr. Crompton proceeded to London in February of the year 1812, and through the influence of some kind and powerful friends who thoroughly appreciating his merits and his misfortunes, pitied him for the injustice with which he had been treated, was enabled to place the memorial and certificate before the Right Honourable Spencer Perceval, then Chancellor of the Exchequer, who appears to have at once interested

himself in the application, and promised that it should be favourably entertained by Government. On the 5th of March a petition, ¹⁵¹ founded upon the memorial, was presented to the House of Commons, and was "ordered to be referred to a committee, with power to send for persons, papers and records." The committee, consisting of twenty-one members, many of whom were connected with Lancashire, met on the 18th of the same month (Lord Stanley, one of the members for Lancashire, being chairman) and examined witnesses, who fully proved all the allegations in the petition; and on the 24th

Lord Stanley. Davies Giddy, Esq. Colonel Stanley. Right Hon. Spencer J. Blackburne, Esq. Perceval. Sir Robert Peel, Bart. George Rose, Esq. Samuel Horrocks, Esq. J. Hodson, Esq. Richard Sharp, Esq. P. Patten, Esq. W. Wilberforce, Esq. A. Houston, Esq. D. Davenport, Esq. Lord Milton. Wilbraham Bootle, Esq. General Tarleton. General Gascoigne. Lord A. Hamilton. Sir James Graham. A. Spir, Esq.

¹⁵¹ See Appendix No. VI.

¹⁵² The committee to consider Crompton's petition consisted of the following members:—

the chairman reported favourably to the House, concluding with these words: "Your committee beg leave to observe that the petitioner appears to them to be highly deserving of a national reward." 153

It now became Crompton's duty strenuously to urge his claims on the attention of those members of Parliament to whom he had introductions, to enlist their interests in his favour, and above all to increase the number of his friends and induce them to think favourably of his pretensions, so that when his business should be brought before the House the remuneration awarded to him by the nation through its representatives in Parliament, should be honourable and liberal; but for this duty unfortunately he was entirely unfitted. The same shyness and diffidence which had proved so formidable an obstacle to his commercial success, compelling him to wrap up his samples of yarn on the Manchester Exchange, and to run away from the honours of a public dinner at Glasgow, clung to him in his new and still more difficult

¹⁵³ For parliamentary report on Mr. Crompton's petition, and minutes of evidence, see Appendix No. VII.

and embarrassing position.¹⁵⁴ He had an unconquerable aversion to waiting upon noblemen and influential members of Parliament in person, preferring to communicate with them by letter. Copies of a considerable portion of this correspondence have been preserved; the letters are invariably written in a style of respectful yet manly and straightforward independence, which we are compelled to admire, though at the same time it must be confessed that they might have been more useful, had they been tempered with a little more worldly policy.

The covering of icy diffidence which enveloped Samuel Crompton, and concealed his better nature, could be easily removed by a little care; and on those who succeeded in thawing it away, he bestowed his unreserved

154 In a letter to John Blackburne, Esq., M.P., who had urged him to apply personally to the finance minister, he says: "Thinking as I do, it can be of no use my accompanying you to the Chancellor of the Exchequer; I decline it. I cannot advocate my own case. Were it another's I could say something. Were I to attempt it in my own case it would shut my mouth. I wish my claims to stand or fall by their own merit."

confidence. Lord Stanley and Mr. Blackburne, the members for Lancashire, were of this number. Crompton always spoke in the warmest terms of the exceeding great kindness he received at their hands. They paid him the most marked and friendly attention, frequently invited him and his eldest son George (who joined him in London for a few weeks) to their tables,155 and introduced them to many influential and powerful friends. This, however, was not the case with all who came in contact with Samuel Crompton. Those only who were themselves kindly and warm-hearted, could warm him into familiarity and confidence. With Sir Robert Peel, who at that time had much influence with the government, and whose opinion, as a retired manufacturer, would have great weight in the question of the amount of his remuneration, Crompton would not, or could not, establish friendly relations. Serious offence

¹⁵⁵ On one of these occasions the conversation turned upon pluralities, and Lord Stanley said: "Mr. Crompton, how would you deal with pluralists?" to which he replied, "I would make them live at both livings at the same time."

had been given and taken thirty years previously, when the baronet first inspected the mule wheel at the Hall-in-the-Wood, employing it immediately afterwards as one of the most successful implements in rearing his colossal fortune. The circumstance probably dwelt unpleasantly in the memory of both, and there is little doubt that a feeling of personal dislike unhappily rankled in their minds throughout the whole of their long lives.

Notwithstanding the kind invitations of his friends, Mr. Crompton must have had many heavy and tiresome days of idleness during his five months' visit to London. Upon one of those days, having strolled to Woolwich, he watched the arrival of a foreign ship, and saw a number of distressed seamen come on shore from it. They had been saved from the wreck of their own vessel, and were landed without money or any change of clothes. Mr. Crompton was not near enough to recognize among them his son John, who had gone to sea about three years before; nor was it until some months afterwards that father and son discovered how near they had been to each other at a time when

mutual recognition would have been so useful to one and delightful to both.¹⁵⁶

He lodged during his visit to London with a family of kind musical friends, whose society must have afforded him some solace amidst the anxieties of his parliamentary business. Mr. Edward Harwood, 157 a musician and composer of considerable celebrity, with whom he had an intimacy of some standing, resided with his daughter at Knightsbridge, and under their hospitable roof Mr. Crompton was comfortably located.

All appeared now to be progressing favourably. The Chancellor of the Exchequer was prepared to propose to the House of Commons a grant to Samuel Crompton in reward for his invaluable invention; when the singularly cruel fatality that had so often before stepped in between him and prosperity, again dashed the cup of success almost from his very lips.

On the 11th day of May Mr. Crompton was in the lobby of the House of Commons in con-

¹⁵⁶ Oral information from Mr. John Crompton.

¹⁵⁷ Edward Harwood, when resident in Lancashire, had studied and practised music under Crompton's tuition.

versation with Sir Robert Peel and Mr. Blackburne upon the subject of his claim which was about to be brought forward, when one of these gentlemen remarked, "Here comes Mr. Perceval." The group was immediately joined by the Chancellor of the Exchequer, who addressed them with the remark, "You will be glad to know that we mean to propose twenty thousand pounds for Crompton; do you think that will be satisfactory?" Mr. Crompton did not hear the reply, as from motives of delicacy he left the party and walked down a short stair leading out of the lobby; but before he left it, he heard a great rush of people and exclamations that Mr. Perceval had been shot, - which was indeed the fact. The assassin, Bellingham, in an instant had deprived the country of a valuable minister, and Crompton lost a friend and patron at the moment of the most critical importance to his fortune. Samuel Crompton however did not hear the shot, though so near the scene of the tragedy, nor did he see Mr. Perceval fall. The foundation on which his reasonable hopes were built was thus again swept away. ministry was dissolved; a month passed before

its reconstruction; and during that month events were daily occurring, each of them having a most evil influence upon the result of his application. Every post brought most disastrous intelligence from Yorkshire and Lancashire. The high price of provisions caused much privation among the working classes, and induced a feeling of political discontent, which led to rioting, the destruction of machinery, midnight attacks upon mills158 and the private dwellings of persons in authority, secret assassinations, and even to deliberate murders in daylight. This state of things was both amazing and alarming to the ministry; and, unfortunately, Bolton was conspicuously distinguished among the disaffected places by the burning of the West-Houghton factory, 159 where seven thousand pounds worth of

¹⁵⁸ The incidents which occurred in this insurrection on the borders of Lancashire and Yorkshire have been described with painful accuracy by the powerful pen of the late Charlotte Bronte in her novel of *Shirley*.

159 Extract from the Report of the Secret Committee of the House of Lords on the disturbed state of certain counties:—

"The same spirit of riot and disturbance appeared at Bolton-in-the-Moors. So early as the 6th of April

property was recklessly consumed; by an extensive system of seditious affiliation, which was bound by secret oaths, discovered through the means of a government spy; and more particularly by the presentation of a petition from the

intelligence was given that at a meeting of delegates from several places, it had been resolved that the manufactory at West-Houghton in that neighbourhood should be destroyed, but that at a subsequent meeting it had been determined that the destruction of this manufactory should be postponed. On the 24th of April, however, the destruction of this manufactory was accomplished. Intelligence having been obtained of the intended attack a military force was sent for its protection, and the assailants dispersed before the arrival of the military, who then retired to their quarters. The rioters, taking advantage of their absence, assailed and forced the manufactory, set it on fire, and again dispersed before the military could again be brought to the spot."—Annual Register, vol. liv. (1812) p. 388.

Captain George and Lieutenant William Crompton, the two eldest sons of Samuel Crompton, were with their regiment employed some weeks in the protection of this factory, while their father was absent in London.

On the 13th May, 1812, James Smith, Thomas Kerfoot, John Fletcher, and Abraham Charlton were executed at Manchester, for participation in the attack upon West-Houghton factory.

inhabitants of Bolton to the House of Commons, couched in extremely strong language, representing that the petitioners were in a state of starvation caused by destruction of trade in consequence of the war with France, which they attributed solely to the misrepresentation of the people in Parliament.¹⁶⁰ Add to these circumstances, that the new Chancellor of the Exchequer found it necessary to propose a loan of sixteen millions to make up deficiencies and carry on the expensive but successful war in the Peninsula, and it may be seen at once that the right honourable gentleman 161 who controlled the purse strings of the country, could have but small inducement to open them widely at that particular time, in favour of Samuel Crompton of Bolton,162

¹⁶⁰ See Appendix No. VIII.

¹⁶¹ The Right Hon. Nicholas Vansittart succeeded Mr. Perceval as Chancellor of the Exchequer.

¹⁶² Yet Crompton had proved before the Committee of the House that he had contributed £300,000 per annum to the revenue, solely from duty on cotton wool imported into the country to be spun on his machine; in other words, putting aside the whole profits of the manufacture, he had placed upon the council table on three hun-

In truth the only subject for consideration with the chancellor, appears to have been the minimum sum to be paid to Crompton as a national reward, both Government and Parliament being pledged to give him something. Samuel Crompton himself had a strong conviction that this was the true state of the case. In a letter dated 16th June, 1812, addressed to Davies Giddy, Esq., one of his most valuable supporters in the House of Commons, he says: "I certainly shall ever feel thankful for the kind support I have had in bringing the case thus far; and yet I feel some degree of fear of the case being pre-judged in this way: 'For how little can we get rid of this man?' I will tell you how. Do not suffer it to be smuggled in at the conclusion, as if it was 'of no consequence whether the case be good or bad, but get rid of it in any way that you can.' Be assured, sir, there will be no difficulty in getting rid of me. I am only waiting the conclusion of Parliament, and the moment it is ascertained I shall with-

dred out of the three hundred and sixty-five days in the preceding year £1,000 a day, to say nothing of the previous thirty-two years.

draw. The only anxiety I now feel is that Parliament may not dishonour themselves. *Me they cannot dishonour*. All the risk is with them. I conceive it to be the greatest honour I can confer on them, to afford them an opportunity of doing me and themselves justice. I am certain my friends and family would be ashamed of me were I to consider myself come here a-begging, or on the contrary demanding. I only request that the case may have a fair and candid hearing, and be dealt with according to its merits." 163

Crompton carefully abstained from stating any sum to which he might have considered himself entitled. When asked by Sir Robert Peel whether he would be satisfied with the same amount that had been paid to Dr. Cartwright, the inventor of the first, but quite ineffective, power-loom, his answer was: "Sir Robert, this is working at the wrong end. I entertain no doubt of the Parliament acting according to their own dignified character, and not doing a mean or little thing, if the case is

¹⁶³ Quoted from Brown's pamphlet in favour of Crompton's claims, p. 29.

fairly brought before them; and, that to say anything about a specific sum would be prejudging the question." 164 But from a clause in another letter addressed to John Blackburne. Esq., M.P., his own expectations may be guessed at. He says: "I am now for once unbosoming myself to you, which I am confident I can do with safety. * * * * * I ask you if there ever was a claim of such importance brought before Parliament as this, at least in a commercial point of view. Not a speculation that remains to be proved, but one whose value is established beyond contradiction. I will venture to say that there are few families that have not been, and now are not, benefited by this machine. Nay I will assert that nine-tenths of the House of Commons wear cloth at a reduced price of forty to fifty per cent that is spun on these machines, and of a beauty which the world cannot equal. After all I will be directed by you, however strongly I may feel not to be deceived or mocked for a third time; and I feel no difficulty in saying that when I gave up the machine to

¹⁶⁴ Brown's pamphlet in favour of Crompton's claims, p. 30.

the country it was worth Fifty Thousand Pounds." 165

On the 24th of June the House of Commons spent a dreary afternoon, first in hearing a long petition from the creditors of the nabobs of the Carnatic, then with a debate on inland navigation in Ireland, and another on the tythes of potatoes in Ireland, — subjects which appear to have excited but little interest. The last business of the sitting was Crompton's claim, which was not introduced by the Government, as had been intended by the previous Chancellor of the Exchequer Mr. Perceval, but by Lord Stanley, who, having moved that the House do resolve itself into a committee of supply, and the Speaker having left the chair, his lordship said: "The case he had to lay before the committee was one that was attended with several circumstances of a particular nature and of peculiar hardship. In the manufactories of cotton goods carried on at Manchester, great advantages had for many years past been derived from machinery. The first article of this kind which

¹⁶⁵ Brown's pamphlet in favour of Crompton's claims, p. 31.

had been produced was called a jenny, and had prevailed for a considerable length of time. On this a very great improvement had been made by Sir Richard Arkwright, who thereby acquired an immense fortune, and the public, through the extension of our manufactures, most extraordinary and extensive benefits. After these improvements had continued for several years Mr. Crompton, whose case he now brought forward, had invented an article of machinery further improving on that of Sir Richard Arkwright, which Mr. Crompton denominated a mule, from the use of which, advantages almost incalculable had been already and were likely to be derived in future. It happened however, as was unfortunately too often the case with superior genius, that Mr. Crompton was in that class of the community a common manufacturer; and having nothing to depend on for his subsistence but his daily labour, he had not the pecuniary means of securing it to himself by a patent—the only regular and legitimate security applied to on similar occasions - and was not able to bring into action those alterations and improvements with which his mind was so deeply impressed.

Having however communicated to many respectable manufacturers those ideas on the subject which he could safely divulge without imparting his secret, he was recommended to try the experiment of a subscription; and from various promises of assistance and support in that way, which had ultimately turned out almost nugatory, he had been induced to lay open his secret, and the public had for many years derived from it the greatest advantages. He had thus been compelled to petition Parliament; and the late Mr. Perceval, from what he saw of the case. sanctioned its going to a committee above stairs, who after hearing a great deal of most respectable evidence reported that the petitioner was entitled to remuneration by Parliament. The committee had not named any sum, but had commissioned him as their chairman to bring the matter forward, and he would conclude by moving 'That a sum not exceeding five thousand pounds be granted to Mr. Crompton as a remuneration for his invention."

Mr. Blackburne seconded the motion.

The Chancellor of the Exchequer expressed himself satisfied that Mr. Crompton deserved this remuneration. Mr. Davies Giddy, who appears to have been the only member of the committee aware of the miserably inadequate amount of the grant, "could not avoid saying that this was one of the transcendent cases that were taken out of the general mass of applications to Parliament for aid, and he hoped therefore that the remuneration would be granted without fee or deduction."

The resolution was then agreed to.166

The attentive reader cannot fail to notice that Lord Stanley's speech, though unquestionably well-intentioned, did not enforce Mr. Crompton's claim in the best way to promote his interest, many of the most important facts being altogether omitted, and others (no doubt unintentionally) misstated; and farther, that it is not a little remarkable that no member engaged in manufacture, or connected with Lancashire, had generosity enough to protest against the miserable injustice of this paltry grant, which McCulloch¹⁶⁷ correctly designates "a pit-

¹⁶⁶ Parliamentary Debates.

¹⁶⁷ Mc Culloch's British Empire, 6th edition, p. 677, 1854.

tance hardly adequate to defray the expenses of the application." ¹⁶⁸

168 In the month of June, 1827, when Samuel Crompton lay on his death bed, exhausted in mind and body, there appeared in the Edinburgh Review a powerfully written and interesting article descriptive of the state of the Cotton Manufacture at that period. The writer appears to have known little of Mr. Crompton's personal history, though he correctly appreciated the merits and importance of his invention. We gladly abstract a brief portion, in which the reviewer indignantly denounces the paltry amount of the national reward, and the unaccountable abnegation of any known principle upon which it was awarded:—

"The House of Commons, as a mark of the national gratitude to an individual whose inventions had so powerfully contributed to extend what had now become the principal manufacture of the country, voted Mr. Crompton a reward of £5,000! To make a lengthened commentary on such a proceeding would be superfluous. Had the House of Commons refused to recognize Mr. Crompton's claim for remuneration, they would, whatever might have been thought of their proceedings, have at least acted consistently. But to admit the principle of the claim, to enter into an elaborate investigation with respect to the merit and extensive application of the invention, and then to vote so contemptible a pittance to the inventor, are proceedings which evince the most extraordinary niggardliness on the part of those who have

Thus, after having haunted the lobby of the House of Parliament for five wearisome months, in hourly expectation of his case being dealt with; leading a life of monotonous anxiety without variety or amusement of any kind, unless we can suppose his presence at the execution of Bellingham, the assassin of Perceval, to be viewed in that light; and day by day subjected to that "hope deferred which maketh the heart sick,"—he returned home to Bolton with this *phantom* of national reward as the requital for his transcendent invention!

never been particularly celebrated for their parsimonious disposition towards individuals whose genius and inventions have alone enabled Parliament to meet the immense expenses the country has had to sustain."— Edinburgh Review, vol. xlvi. p. 16, 1827.

CHAPTER XV.

Application made to Crompton for the loan of £1,000. Expenses of the Grant. Letter to Mr. White. Calumnious report in London. Palmer's claim for Compensation. Its result. Comparison with Crompton's. Lord Lauderdale's opinion. Disappointment of Crompton's friends and family. Commences business as Bleacher at Darwen. Partnership with Mr. Wylde as Cotton Merchant and Spinuer. All his Sons established in business. Want of success. Dispersion. His Patterns pirated. His habits, appearance, and opinions.

Soon after Mr. Crompton's return to Bolton from his five months' sojourn in the metropolis, he received an intimation from Messrs. Drummond, the bankers, that the money awarded by Parliament had been paid to his account by the Treasury; but the pleasure of this announcement was much qualified by other communications received at the same time; the first of these being a request from one of his parliamentary friends for a loan of one thousand, out of the five thousand pounds, he had assisted to procure. To this, however, Mr. Crompton did not, and probably could not prudently, accede.

The expenses attendant upon his journeys through England, Scotland, and Ireland, in search of statistics; the travelling and other expenses of his witnesses; his long residence in London; and the neglect of business not only by himself but by his family—his two eldest sons being then entirely occupied by their military duties as officers in a militia regiment under arms,—must have melted down the five thousand pounds by anticipation, to a comparatively small sum.

Though it was distinctly agreed that his remuneration should "be granted without fee or deduction," it was nevertheless clogged with several heavy charges; one of which, amounting to £47 17s. 4d. being "fees to both Houses for inserting one clause in the appropriation act," appears to have given considerable vexation, as we gather from the rough draught of a letter¹⁶⁹ he addressed upon the subject to George White Esq., a gentleman who had some official connexion with Parliament. In this letter he complains that the expense of the

¹⁶⁹ In the present possession of Samuel Crompton, Esq., of Manchester.

parliamentary fees was much more than he was led to expect, having been told that it would not exceed £100; and he adds: "Not that I care what the expense is, whether you can believe me or not, for I never pledged myself to accept a mere mockery of a reward; but as the money is now paid, I think it but common justice that you and myself and every other [person] should first of all be paid the expenses that have unavoidably been incurred; and as to the remainder, if any, I have not made up my mind whether to accept it or not."

As this letter very clearly indicates Crompton's own opinion of the result of his application to Parliament, we quote the concluding paragraphs:—

"It always appeared to me that the leading men in the Government did not consider the case but the man, who they ventured to suppose had never had the command of a thousand pounds; which is a sad mistake, or they would never have said, 'Give the man £100 a year, it will be as much as he can drink.' But I have one comfort, that I have told it often to them (after the case was made out) that me they could not

dishonour; all the risk lay with themselves; and when I saw they were determined to go in their own way I felt extremely sorry that I had ever come forward and given them an opportunity of dishonouring themselves. Mr. Vansittart told J. Blackburne, Esq., that '£5,000 was no sum; if it had been £20,000 it would have been something nearer the mark;'—and after all could not consent the day following to go beyond £5,000. This shows to me they wished only to get rid of me; as he found £5,000 had been in Mr. Perceval's private papers, ¹⁷⁰ he chose to stick there, and contradict his better judgment."

The unjust and offensive expression, "Give the man £100 a year, it will be as much as he can drink," which Mr. Crompton refers to in this letter, was no doubt used by parties who were either ignorant of his temperate and frugal habits, or, as he himself believed, maliciously de-

¹⁷⁰ Mr. Perceval, when he was shot, had a memorandum in his hand—

Crompton £20,000, £10,000, £5,000,—

which was understood to signify not less than £5,000, but £20,000 if possible.

sirous to defeat his purpose. He did not hesitate to attribute the niggardly amount of the grant to the belief in this most false insinuation; which, even if it originated in the notion that the possession of a large sum of money would lead him to idleness and intemperance, (the most charitable construction that can be put upon the remark,) was a gross insult, not only to Crompton, but to the useful and meritorious class of men of which he was a notable and noble example.

On the 25th of June 1812, the very next day after the House of Commons had disposed of Crompton's case, another claim for a national reward was taken into consideration, and dealt with in a manner so singularly different, that we venture to narrate the particulars as powerfully demonstrative of the injustice done to our hero.

Mr. John Palmer, a native of Bath, established a brewery, and procured (through his family interest at Court) a patent for a theatre in that city. He was an ingenious, enterprising, and successful man. Palmer saw the deficiencies of the postal arrangement of the kingdom towards the end of the last century, and pro-

posed to Government a plan for their reform, and particularly for the establishment of the admirable system of mail coaches, which was so long the admiration of the entire country. After some opposition, Government acceded to his proposals, appointing him Comptroller of the Post-office, his salary being £1,500 a year, with a tacit or implied promise of farther advantages should his plan be successful. It was proposed at an opportune moment, and became successful in the highest degree; the revenue was greatly increased, and the number of letters conveyed by the mails wonderfully multiplied. It must, however, be remembered that these letters were not written and sent merely because Mr. Palmer's mail coaches were ready to convey The increase in the trade and manufactures of the country, caused in a great degree by Crompton's and other inventions, compelled the large interchange of letters in spite of the enormous tax with which each was at that time burdened. Mr. Palmer, though a clever man, was no Rowland Hill, and did nothing to diminish the cost of postage. On the contrary the charges on the transit of letters were greatly increased. He had become troublesome to the government, and confessedly was guilty of such derelictions of public duty as to justify his dismissal from office in the year 1792. more is heard of Mr. Palmer until the year 1812, when Crompton's claims were brought forward. A bill was then introduced in the House of Commons for payment of "a sum not exceeding £78,344 12s. 6d.," being the balance of a per-centage said to be due to Palmer on the increased revenue of the post-office, up to the 5th January 1812. It was argued in opposition, and not denied, that Mr. Palmer had already received £80,000 as compensation for his services, nearly £60,000 of which had been paid to him as a pensioner of the public after he had ceased to perform any duty whatever. Nevertheless the full amount was voted to him by a majority of thirty-seven members.¹⁷¹

Palmer's case was soon after brought before the House of Lords. Lord Lauderdale opposed the grant, stating that the House of Commons must have passed the bill under some mistake or error, as "they would never otherwise have

¹⁷¹ Parliamentary Debates, vol. xxxiii. p. 771.

been so lavish, when they were so very economical in regard to the inventor of a machine called the mule, which had proved of such vast advantage to the country and the revenue, the Commons only giving Mr. Crompton £5,000, though he considered Mr. Palmer's plan as nothing in comparison with Mr. Crompton's invention." The motion, however, was carried in the Lords by a majority of fourteen. It is almost superfluous to say that, unlike our modest hero, whose claim had been so coldly urged and frigidly agreed to, Mr. Palmer had a host of warm personal friends and family connexions in Parliament, who united heartily in voting his absurdly extravagant remuneration, amounting in the aggregate to the enormous sum of £158,344 12s. 6d. Comment on this remarkable contrast our readers may consider unnecessary, but we venture to suggest that had Crompton received $2\frac{1}{2}$ per cent (the ratio of Palmer's reward) on the increased revenue derived from the import of cotton wool spun on the mule for the year 1812 alone, it would have exceeded £7,750, without any notice of the immense revenue received by the government on the export of manufactured cotton goods and yarn. What it would have reached at the rate of $2\frac{1}{9}$ per cent on the revenue derived by the country on the imports of cotton, and the export of varn and cloth, from the year 1780, when Crompton made his machine, till 1827 when he died in poverty, we do not pretend to be able to say; but so large was that revenue that it enabled the government of this country to cope with and overcome the overgrown power of Bonaparte, and did more than the cannon and bayonets of Wellington¹⁷² to bring peace and prosperity to the nation. must it be forgot that Mr. Palmer's post-office arrangements, mail coaches and all (so enormously paid for), have been long since swept away as totally inadequate to the business requirements of the country; while Crompton's system of mule spinning continues to meet

¹⁷² On the same night that Mr. Crompton's petition was presented to the House of Commons, Earl Grosvenor suggested in the House of Lords that £50,000 should be invested in trustees, for the purpose of purchasing free-hold property to descend to the heirs of the Earl of Wellington.—Parliamentary Debates, vol. xxxi. p. 1168.

every demand made upon it, and its power is proved to be limited only by the supply of material to operate upon.

Samuel Crompton's friends in Lancashire, and his sons in particular, were greatly disappointed at the result of his application for a national reward. When their poor father was gloomily walking the streets of London and the lobby of the House of Commons, the young men were busy building "castles in the air," and cultivating business connections, pleasures and friendships, which for the most part dropt to the ground with the news of his blighted prospects. Perhaps the heaviest blow that fell upon the unhappy man was, on his return to Bolton, to hear the remarks of his elder sons, who upbraided him with bad management and neglect of their interests in London. But even this bitter addition to his heavy disappointment he met without anger, and set to work to do the best he could for their future welfare, with the limited means now at his command.

The process of bleaching had been wonderfully improved by new scientific appliances, and large fortunes made in the neighbourhood of Bolton during recent years in that business. In consequence of this extraordinary success Mr. Crompton was tempted to rent bleachworks at Over Darwen, called Hilton's Higher works, and assumed as partners his eldest and youngest sons, George and James, the former being manager. Here they built a pleasant dwelling-house, where Mr. Crompton occasionally resided during the next five years. The business, which was that of bleaching for calico printers, at first promised to be very prosperous, but this success was not realized. Coal pits were sunk under and about the works, which greatly injured the quality and the supply of spring

173 The organ (see p. 133) was removed to Darwen during his residence there, and he continued to indulge his taste for music, which afforded him the highest gratification. His sons sometimes subjected him to a curious playful annoyance, by performing discordant medleys when he was out of the room but within hearing of the instrument: "This always produced a strangely disagreeable effect upon him, and seemed to jar his whole frame." — Information from a descendant.

¹⁷⁴ Pigot's *Commercial Directory*, published in 1818, contains, among the list of Bolton bleachers, "Crompton Samuel and Co., near Darwen."

water, and this led to a tedious and expensive law-suit with the landlord. The situation also was unfavourable, and the times particularly so. All these drawbacks, added to inexperience and mismanagement on the part of his eldest son,¹⁷⁵

175 George Crompton had long entertained a desire to enter into the army. The following letter from Lord Stanley, with its enclosure from Colonel Henry Torrens, private secretary to the Duke of York, shows that the authorities of the time came under a promise to give him a commission,—a promise, however, which was never realized:—

"Mr. Crompton,—" "Knowsley, June 13th, 1813.

I am very glad that it is in my power to relieve your suspense by the enclosed letter, which I yesterday received from Colonel Torrens, private secretary to the Commander-in-Chief.

I have the honour to be, &c.,

To Mr. G. Crompton,

STANLEY.

Mr. Wiseman's,

Church-street,

Kensington,

London."

(Copy.) "Horse Guards, 7th June, 1813. "My Lord,

Having submitted to the Commander-in-Chief your lordship's letter of the 2nd inst., with its enclosure, caused the establishment to be abandoned in less than five years. The youngest son James was about this time most happily married and established in life. But Mr. Crompton's business was not confined to bleaching. He carried on the old spinning and manufacturing concern in connexion with his sons Samuel and John; and entered also in partnership with Mr. Wylde and his favourite son William, as cotton merchants and spinners. The two young men in whose

I am directed to acquaint you that the name of Mr. George Crompton is noted for a Commission, and to assure you that His Royal Highness will be glad to give your request every favourable consideration that his numerous engagements will admit.

I have the honour to be,

My Lord,

Your Lordship's most obdt.

humble servant,

To the Right Hon.

H. Torrens.

Lord Stanley."

Mr. Crompton was himself always opposed to the military bias of his two eldest sons, attributing to it their comparative want of success in business; and Lord Stanley, though willing to employ his interest to procure him a commission, strongly advised Mr. George Crompton not to enter the army.

charge the muslin manufacturing business was placed, were unfortunately of very opposite tempers, and could not work together with harmony or profit. They very soon separated, Samuel going to Ireland, and Mr. Crompton continuing the business with such help as John could afford him.

His business as cotton merchant with Mr. Wylde and his son William, 176 must have been of considerable extent, and, notwithstanding at least one very heavy loss, in some degree profitable. The firm had supplied cotton wool on credit to the owner of a mill called the Delph mill, at the Dingle in Turton, which was not successfully worked, and they found themselves heavily involved; having, however, taken the machinery as security for their debt, they supplied further capital, and employed the original proprietor to spin for them on commission; but

176 The Bolton Directory for 1818 mentions "Crompton (Samuel), cotton spinner and manufacturer, Kingstreet," his place of business in Manchester being in Blue Boar Court; and "Wylde (Richard) and Co., cotton merchants and spinners, Ridgway Gates," Bolton, whose Manchester warehouse was in Ormrod Court.

one unfortunate night the weir broke down in a flood, and mill, machinery, stock and security were all swept away just when there was a clear prospect of a profitable return for their investment. Mr. Wylde about this time purchased on his own account, the building of a large mill at Wilderswood in Horwich, and the firm joined in filling it with machinery, and in working it for some time. William, however, appears to have disliked the business, and the company was dissolved, the machinery being sold to the late Mr. Richard Bennet, son-in-law to Mr. Wylde. Mr. Crompton and William both retired. The latter took with him £1,500 his share of capital, left Bolton, and set up an entirely different business in Oldham. He did not succeed there, however; a fire consumed his stock, and a law-suit grew out of the fire, which together carried off much of his capital. He died of cholera in 1832, leaving some property and no family.

His sons being now all dispersed, Mr. Crompton carried on his small original business without assistance, spending much of his time in devising the mechanism proper for weaving new

patterns in fancy muslins. This occupation was one in which the peculiar powers of his mind had full scope, and it afforded him great delight; but he was entirely deficient in the business habits requisite to make these new devices profitable. No sooner did he succeed in producing them than his novel patterns were pirated, and manufactured in fabrics of inferior quality, by his near neighbours and pretended friends, who were thus able to undersell and beat him out of the Manchester market; cruelly wounding him with his own weapons, stolen for the express purpose. This unhappy fatality followed him throughout his entire life as closely as his shadow, so that his acknowledged talent not only remained unrewarded, but was a positive blight upon everything he undertook, instead of being as with other men, a blessing. Once more we quote his own melancholy account of the persecution his celebrity brought upon him: -

"To this day, though it is more than thirty years since my first machine was shown to the public, I am hunted and watched with as much never-ceasing care as if I was the most notorious villain that ever disgraced the human

form; and I do affirm that if I were to go to a smithy to get a common nail made, if opportunity offered to the by-standers, they would examine it most minutely, to see if it was anything but a nail."

Under such circumstances it could not be otherwise than that year by year, Samuel Crompton must become a poorer man, though he continued always a respected one. Some of our local readers may yet remember the tall but somewhat bent figure of the quiet old man, as he slowly and thoughtfully paced the streets of Bolton thirty-five years ago. He had at that time very few intimate acquaintances, but did not object to meet his brother manufacturers to hear and discuss the news of the day, in the parlour of some respectable public-house, as was then the regular custom. At such meetings he was taciturn but not gloomy. It appeared as if he always felt that he was an ill-used and an unfortunate man, but he never complained or obtruded his misfortunes on the attention of others. Unable to obtain justice, he scorned to ask for pity. He had no extreme views in politics, nor did he take much interest in such

subjects. Leaning to the Church-and-King principles of his day, he was yet in favour of reform, had a rooted objection to sinecures, and greatly regretted the waste of life and property which war occasions. The Emperor Napoleon (of his day) could have been no favourite with him. Mr. Kennedy says that "at the time of Bonaparte's marriage with the Archduchess of Austria, a lady observed to Mr. Crompton that she hoped he would have a family, that it might humanize him, when he quietly replied, 'Do you want a breed on 'em?' an instance, says Mr. Kennedy, of his cool and deliberate way of thinking."

CHAPTER XVI.

Tempting invitations to carry his inventions abroad. Patriotically resisted. The "Blue Key" Club. Crompton's every-day dress. His peculiar opinions on eating, hunting, fishing and education. Abhorrence of imprecations. Love of Children. Stubborn perseverance. Unfortunate domestic arrangement in his old age. Rescue from poverty. Annuity purchased. His Portrait engraved. The "Black Horse" Club.

At various different times after the invention and establishment of mule spinning, Mr. Crompton was visited by gentlemen from France, Austria and Switzerland, many of whom either personally or by their agents offered him very flattering inducements to leave this country (which they urged was insensible to his merits and unworthy of his regard), and to exercise his inventive talents abroad, where they would be properly appreciated and adequately rewarded; but his loyalty and patriotism enabled him even when most depressed and neglected, to decline all these friendly and flattering offers. His own feelings, when subjected to this temptation, are thus expressed in a letter to one of his parliamentary friends: -

"I will only add that whatever temptations I have ever had held out to me by Foreign Powers, I never could bring myself to think so ill of this country, with all its faults, as to prefer any other offered to me in exchange; though I must confess it is very trying when one has laboured for so long a time, and at all the risk in one's power, to be beset the moment you arrive at the harbour of rest and profit, and have the prize wrested from you by a set of unprincipled beings, who had no regard for anything but their own interest; and thus to have all one's hopes disappointed, and that at a time too when you were exhausted by labouring to give birth to the object of your pursuit, which certainly has been the case with me."177

A little club of manufacturers, all of them old men, who about this time met with great regularity in the forenoon at the Millstone Inn, to drink their single glass of ale, and (in the absence of penny papers) to compare notes on the rumours or news of the day, established a curious custom among themselves, which though

¹⁷⁷ Extract from a letter to John Blackburne, Esq., M.P., dated London, 27th April 1812.

trifling may be worth recording. There were no great number of clerks and assistants in those days, and when a manufacturer left his countingroom or warehouse, he locked the door and carried off the key, generally a pretty large one. Now, this Millstone Club, of which Samuel Crompton was a member, preferred, in cold weather, to have their ale with the chill off. To effect this it was the habit of each member to put the bow of his warehouse key into the fire, and when sufficiently warm plunge it into his glass of ale. A long continuance of this custom caused the handle of each key to become of a dark blue colour, and this "blue key" became a kind of emblem or talisman of the club.¹⁷⁸

Mr. Crompton's every-day costume, was like that of other respectable manufacturers of the period, and has been thus described by one of his sons, who said that "his father's usual dress was corduroy breeches, gray woollen stockings, dark gray or black coat, coloured neckcloth, and always clean shirt and shoes." He cared little about the quality of his food. A muchloved daughter-in-law, still alive, testifies that

¹⁷⁸ Information supplied by Robert Barton, Esq.

he was the least fastidious in this particular of any man she ever knew; yet he had some peculiar opinions, objecting to the use of lamb or veal, and to very young peas or potatoes, because the epicurean indulgence of eating them in that early state prevented their being turned to the best advantage, since the delay of a few days or weeks would add greatly to their bulk, and thus enable them to do much more good to mankind. He did not fish, hunt or shoot, and had a decided objection to fly-fishing, considering it to be a treacherous and deceitful practice. He strongly objected to boys being taught Latin or Greek, unless intended for the learned professions.¹⁷⁹ The use of oaths and imprecations, a too common vice even among the educated men of his time, he held in great abhorrence, and a rude or irreverent expression never escaped his lips. He was affectionately fond of

¹⁷⁹ He was however fond of reading abstruse books on theology, and especially delighted in the study of the writings of Swedenborg. A very favourite work was Hindmarch's "Seal on the lips of the Unitarian and Tritarian unbelievers;" the author was a personal friend of Crompton's, and occasionally visited him for two or three weeks at a time.

children, and was himself always a great friend of theirs - a certain proof of his innate goodness of heart. He was invariably a kind, if not always a judicious father, though some of his sons complained of him as a harsh and strict master in affairs of business. All his family have borne testimony to his indomitable spirit of perseverance. "If," says one of his sons, "he had an awkward bit of wood to manage, he would work it to his purpose at any expense of time and labour, or he would destroy it entirely; nothing would induce him to lay it aside and select another piece." When sitting with his young family he would frequently become abstracted in deep thought. At such times he would hold his teacup within an inch of his face, poised on three fingers, and remain thus immoveable for a minute or so; his wife carefully keeping the children quiet, and never permitting them to break the chain of his thoughts by any remark upon their father's peculiarities.150

¹⁸⁰ There was much similarity in manners, habits and religious opinions between Samuel Crompton and Highs of Leigh, who all but succeeded with the parallel invention snatched from his hands by Arkwright. Both were

As old age crept on, Mr. Crompton became less and less fitted for business; he had from the best motives received his widowed daughter as his housekeeper, but her management was worse than improvident, and he had now lost the strength and firmness necessary to control her habits. The fact must not be denied; he then, and for the first time in a long life, sunk into poverty. But there was a noble band of Bolton men and others ready for his rescue. We refrain from naming any of those who are still alive, but do only due honour to departed worthies when we state that in 1824 the late Peter Rothwell, Benjamin Hick, Isaac and Benjamin Dobson, James Taylor, all of Bolton, with Mr. Kennedy of Manchester, and other friends,

followers of Swedenborg; and Highs is thus described by Guest in his *British Cotton Manufactures*: "Of his devotion to his art, and the intensity of his thinking, an idea may be formed from the circumstance of his frequently standing in meditation with his back to the wall and his eyes half closed, for an hour or two together, without change of position. At such times he would exhibit great impatience and vexation if by words or otherwise he happened to be disturbed." — Edition of 1828, p. 208.

unasked by and unknown to Crompton, organized a subscription for the purchase of an annuity which produced sixty-three pounds. The management of this fund was entrusted to his old musical friend Mr. James Taylor; and all who remember his genial good-humoured countenance will agree that human beneficence could not readily flow through a more agreeable or appropriate channel. These good men were not content with this alone; they caused his portrait to be engraved, that the world might look upon the face of one who had bestowed on it so large a material blessing. The engraving was published for his benefit; but the benefit must have been small indeed, as very few copies were disposed of. 181 Probably the manufacturing public of Lancashire disliked to see the face of a man which they could not look upon, without painful recollections of the neglect and ingratitude of which too many of them had been guilty. 182

¹⁸¹ During a residence in Bolton of thirty years, the author has never met with more than two impressions of this plate.

¹⁸² Mr. Crompton's portrait was engraved for Baines's *History of Lancashire*, and it illustrates Baines's *History*

The Bolton gentlemen who took this warm interest in Mr. Crompton, were in the habit of meeting one evening every week at the respectable inn distinguished by the sign of the Black Horse, and he had a standing invitation to their party. He usually attended, drinking his one glass of ale, seldom speaking, except when directly addressed, and then always briefly and to the point. He never asked favours, and appeared to shrink as much as possible from publicity, feeling sensitively any appearance of patronage which might be extended to him, though that feeling was never expressed in words. Such is the impression left on the mind of an esteemed townsman,183 who saw him frequently during the last twenty years of his life, and met him regularly at the Black Horse Club.

of the Cotton Manufacture. An engraving also accompanies the brief memoir of Crompton in Fisher's National Portrait Gallery.

¹⁸³ John Mawdsley Esq.

CHAPTER XVII.

Mr. Huskisson's Speech on Customs Duties. Enormous increase of the Cotton Manufactures. Importation of Cotton Wool at different periods contrasted. Government grants to M'Adam. Dr. Jenner. Crompton's intimacy with Mr. J. Brown. Brown's pamphlet in favour of Crompton's claims. Memorial signed by Bolton Manufacturers for a second compensation. Second petition to Parliament. Unsuccessful letter from Brown to Crompton. His last disappointment.

On the 25th March, 1825, Mr. Huskisson, in a memorable speech to the Commons, then sitting in committee on the Consolidated Customs Duties, informed the House that "the quantity of cotton wool imported into Great Britain in the year ending 5th January, 1765, was about 3,360,000 lbs.," ¹⁸⁴ and that "the quantity imported in the year ending 5th January, 1825, amounted to 147,147,000 lbs." By placing in juxta-position with the above the weight of cotton wool imported at two other intervening dates corresponding with the dates of the im-

¹⁸⁴ Hansard's *Parliamentary Debates* (new series), vol. xii. p. 1200.

portant inventions for spinning it into thread, we may obtain a fair approximate idea of the effect they had, in causing this enormously increased importation. In the year 1765 cotton yarn was spun in single threads by the fingers, and the quantity of cotton wool imported in that year was 3,360,000 lbs. In 1780 the quantity imported was 6,766,613 lbs. 185 During all these fifteen years Hargreaves's jenny had been regularly used, and for ten years Arkwright's patented water-frame; the result being, to double the importation and a little more. In 1800 the quantity of cotton wool imported was 56,010,732 lbs,186 showing the import to have multiplied by about eight and a quarter times during the first twenty years' use of Crompton's mule frames. In 1825 all the appliances for spinning, aided by the steamengine, had not again tripled the importation, which that year amounted to 147,147,000 lbs. A single glance at these dates and figures sufficiently shows that the invention of the muleframe was the pivot upon which the greatest

Baines's History of the Cotton Manufacture, p. 215.Ibid.

manufacture of the world entirely turned. From the day on which the Hall-in-the-Wood wheels were exhibited to the public, that manufacture has progressively increased at a prodigious rate, and has now reached a magnitude and importance interesting not merely to this nation, but almost to the entire human race, who derive from it material comforts and blessings second only to those resulting from agriculture. Any estimate formed on the weight of raw material consumed, gives, however, a most inadequate idea of the value of the mule wheels, or of the work they accomplished, as the yarn produced by them was probably three times finer than the average yarn spun by the water-frame or jenny. Consequently the length of yarn spun, rather than the weight of cotton consumed, is (setting the question of quality entirely aside) the true criterion by which to judge of the value of these machines.

Soon after the delivery of Mr. Huskisson's speech, which had attracted public attention to the vast importance of the cotton trade, there appeared in the public papers a report that Parliament had voted a *third* grant of money to

Mr. M'Adam for his improved system of roadmaking; though it was asserted without contradiction that "Mr. M'Adam's sense of private advantage had led him and three of his sons to embark in an object, and the success that had attended their speculation had yielded to them all the most liberal remuneration. Out of different public trusts for the previous five years they had drawn no less a sum than forty-one thousand pounds; their claim for expenses, on the average of four hundred pounds per annum for each of the family, being made not on the economical rate of a surveyor of the road, who would have been satisfied to ride his horse, and dine on a beef steak or mutton chop; the firm of M'Adam travelled in their post-chaise and four, and enjoyed all the delicacies of the season." 187 Notwithstanding these damaging remarks, Mr. M'Adam's third parliamentary grant was carried by a majority of fifty-seven.

¹⁸⁷ Hansard's Parliamentary Debates (new series), vol. xiii. p. 597. The government patronage of the M'Adam family did not stop here. Mr. M'Adam himself declined the honour of knighthood, but it was bestowed upon his son (Sir James Nicoll M'Adam) in 1834, and his grandson

It was also well known that Dr. Jenner, who gave to the public his invaluable discovery of vaccination in the same year that Crompton gave up his invention to the nation, had received a grant of £10,000 in 1802 from Parliament, and a second remuneration of £20,000 in 1807, besides an appointment for life, which brought him high professional honour and a shower of gold medals and diamond rings, from imperial and royal personages. 158

holds the office of Surveyor-General of Turnpike Roads in England (Burke's *Landed Gentry*), an office which, it may be presumed, is not merely honorary.

"Happy M'Adam who can'st knock A ten pound note out of a rock:
Can'st so adroitly smooth the way,
To make even parliament defray;
Had I that art by you discern'd,
I wouldn't leave a stone unturn'd
Till I had learnt to coin and mint
A golden sovereign from a flint."

Colossus of Roads.

¹⁸⁸ A bronze statue of Jenner, the work of W. Calder Marshall, Esq., R.A., was placed in Trafalgar Square, London, in May, 1858; a graceful though tardy memorial of a truly great man, well entitled to the gratitude not of the nation only, but of the whole human family.

These circumstances appear to have been urged upon Mr. Crompton's notice by a Mr. J. Brown, then resident in Bolton, and engaged in writing a history of the town, which was in course of publication in numbers. Brown must have sought information for this work from Mr. Crompton, and it is clear that a very considerable intimacy sprung up between them, as we find that they visited together many places of interest in Bolton and its neighbourhood, and among others the Hall-in-the-Wood, where Crompton pointed out to his companion the rooms in which he had invented and worked his machine, and the loft where he concealed it from the machine-breaking rioters¹⁸⁹ in 1779. There can be little doubt that Brown learned from Crompton's conversation all the circumstances of his eventful life, and that the interesting recital suggested to him the project (in which he was probably not entirely disinterested) of an application to Parliament for a second and

Dr. Jenner died thirty-five years before this statue was erected to his memory.

¹⁸⁹ Oral information communicated by Mr. Bromiley, then and now resident at the Hall-in-the-Wood.

more adequate remuneration to Samuel Crompton, in accordance with the precedents afforded by the cases of Dr. Jenner and Mr. M'Adam. Mr. Crompton, then in his seventy-second year, and failing somewhat both in mind and body, readily yielded to the persuasions of his friend, and agreed to his proposal. Brown appears to have entered into his task with the utmost enthusiasm, leaving his "History of Bolton" uncompleted, and devoting his whole time and energy to the advocacy of Crompton's claims upon the nation.

His first step appears to have been the compilation of a pamphlet of thirty-two pages, entitled, "The Basis of Mr. Samuel Crompton's Claims to a Second Remuneration from Parliament for his Discovery of the Mule-Spinning Machine," which was printed in London, but bears no publisher's name. The pamphlet recites many facts in Crompton's favour, but is now chiefly valuable as containing printed extracts from the inventor's papers, 190 intrusted to Brown's keeping, and which but for the pamphlet would

¹⁹⁰ Mr. Crompton's descendants have hitherto failed to recover any of these papers.

now have been lost. We have no means of ascertaining to what extent Brown's pamphlet was sold or circulated, but it is now rarely to be met with. He next proceeded to draw up the following memorial, dated May, 1825, addressed to the Lords of the Treasury, and to the President of the Board of Trade, signed by the whole of the engineers, founders and machine-makers in Bolton, and by the principal cotton spinners and manufacturers:—

"That your memorialists are practically acquainted with the progressive improvement and present state of the cotton manufacture of this and the adjoining counties, and are unanimously of opinion that the British muslin, cotton cambric, and cotton lace manufactures, now carried on to so prodigious an extent, are wholly the result of Mr. Samuel Crompton's invention of a machine for spinning cotton yarn, first known by the name of 'Hall-in-the-Wood wheels,' and since by the appellation of 'the mule.'

"That in June, 1812, the sum of five thousand pounds was awarded by Parliament to Mr. Samuel Crompton, as a national reward for this influential discovery, in consequence of his

having, many years prior to this era, been induced to give up this important invention to the public, in expectation of deriving a pecuniary equivalent, which was not rendered to him.

"That some time prior to any parliamentary grant having been made to Mr. Samuel Crompton, the sum of ten thousand pounds had been awarded by Parliament to the inventor of a machine for weaving cotton cloth, called the power-loom, although the inventor had had the chance of profits arising from its use secured to him by patents.

"That your memorialists as respectfully as positively affirm, so overwhelmingly greater was then the value of Mr. Crompton's spinning machine to the trade and revenue of Great Britain over that called the power-loom, they know not how to make any accurate comparison.

"That, from whatever cause the sum of five thousand pounds was fixed upon as the meed of Mr. Crompton's merit, it was utterly inadequate, and below the value of the sacrifice he had made or submitted to; and that Mr. Samuel Crompton has the strongest claims imaginable upon the equity of Government and the gratitude of his country.

"That, therefore, your memorialists, being wholly disinterested and actuated by public motives alone, with the greatest deference, humbly pray that the claims and services of Mr. Samuel Crompton may be forthwith revised, and a reward commensurate with his high deserts and the dignity of the British monarchy awarded to him.

"And your memorialists will ever pray."
Bolton-le-Moors, 29th May, 1825."

This document was extensively and willingly signed by the influential inhabitants of Bolton. In return for so valuable a mark of respect from his neighbours and townsmen, Mr. Crompton (somewhat injudiciously) desired that the applications for signatures should be confined to Bolton. He did not himself wait upon a single individual, or use any inducement to influence any one to act in his favour. Nor would he avail himself of the advantages of a public meeting which was proposed to be convened in Bolton to sanction and support his application to Parliament.

Mr. Brown, who was evidently more sanguine in his hopes than judicious in his plans for realizing them, appears to have drawn up in London in the early part of 1826 a long petition from Samuel Crompton to the House of Commons, urging every available argument in favour of a second and more adequate remuneration.¹⁹¹ Printed copies of this petition were placed in the hands of Mr. Crompton's friends; and there is abundant evidence that Brown was indefatigable in his endeavours to procure a favourable consideration of Crompton's case from the government of the day. In this however he was not successful. He attributed his failure to secret opposition, hinted at in the following extract from a letter addressed to Samuel Crompton, dated London, 22nd April, 1826: "My dear sir **** Now, without throwing a greater load of griefs upon your mind [than it] may be able to bear, I tell you my firm belief to be, that your primitive enemy has undermined you in every department of the executive government; that Lord Bexley was sincere in his desire to serve, and

¹⁹¹ See Appendix No. IX.

only failed from the want of power without losing his own declining weight in the cabinet.

***** Adieu, my friend. Not always may the oppressor prosper!" &c. &c. &c. 192

The obituary notice of Mr. Crompton in the "Intellectual Repository" intimates that this second petition was presented to the House of Commons; but on a careful examination of the lists of petitions and the business of the House during the Sessions of 1826 and 1827 we failed to discover any trace of its having been brought forward. Mr. Brown's lamentable suicide threw a cloud of obscurity over the transactions which it would now be difficult to penetrate. We abstain from any attempt to do so; but record with heartfelt sorrow the most lamentable fact, that even the very last days of our hero's melancholy life were accompanied by a repetition of the neglect, injustice and ingratitude which had attended his every footstep.

¹⁹³ Extract from a Letter in the possession of Samuel Crompton Esq., of Cavendish-place, Manchester.

CHAPTER XVIII.

Death of Samuel Crompton. His Bust taken. Submitted to Mr. Bally, phrenologist. His report. Funeral of Mr. Crompton. Inscription on the stone placed over his grave. His memory neglected.

Samuel Crompton died in his house in Kingstreet, Great Bolton, on the 26th June, 1827, aged seventy-four years, of no particular complaint, but by the gradual decay of nature, increased if not hastened by a life brimfull of

193 His medical attendant John Moore, Esq., who has retired from practice many years ago, was at that time a very eminent surgeon in Bolton. Mr. Moore obligingly transmitted his recollections of Mr. Crompton's last illness. In a letter to the author dated 11th May, 1859, he says: "Mr. Crompton was a quiet, diffident and unassuming man, much respected by his neighbours and friends. * * * * I attended him during his last protracted illness, which was a gradual breaking up of his constitution, without any visible disease, or apparent suffering from pain. I know how much he was esteemed as the chief inventor of cotton-spinning machinery, and I hope in your publication you will do him due justice, and say 'Palmam qui meruit ferat.'"

corrosive cares and mental sorrows. These cares and sorrows were greatly accumulated in his latter days, so that unhappily neither mind nor body could at all times bear up against them, and he became occasionally less abstemious in his habits, than had been his custom through his former life. To the last, however, he retained the esteem of his friends, and the respectful pity of all who knew him.

On his death becoming known in the town of Bolton, some friends were desirous to possess a permanent record of his personal appearance. Mainly through the instrumentality of Matthew Dawes, Esq. (now of Westbrook), an artist was employed to take casts of his head and face in plaster of Paris. These were afterwards put together, and a bust of Mr. Crompton was published. Only a few copies, however, were made of it, and we cannot now learn what has become of the moulds. One copy of the bust was presented to the Public Free Library and Museum of Bolton, by Thomas Thomasson, Esq., of High Bank. The mask was not very

¹⁹⁴ By Mr. Eccles, of Bolton.

¹⁹⁵ By permission of the library committee of the town

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carefully taken, and the separate portions did not fit exactly together, particularly at the neck, which is greatly contorted, and apparently swollen. There was, however, no such deformity on the person of Mr. Crompton. We have been informed that the artist experienced great difficulty in making an accurate adjustment of the parts, from the position in which the body was placed in bed. 196 With that exception, however, his fine head and contemplative features are well represented by the bust, as they appeared in the solemn calmness of death. Many of his old friends, who remembered him well, but who have themselves since followed him into the "valley of the shadow of death," readily recognized his well-remembered features, and have assured us that it is an excellent likeness.

Desirous to collect every gleam of light that could be made to illuminate the character of

council of Bolton, this bust was exhibited to the audience when the author read his second Paper on the Life and Times of Samuel Crompton.

¹⁹⁶ Information to the author from James Black, Esq., M.D., now of Edinburgh, formerly of Bolton, who was present when the cast of Mr. Crompton's head was taken.

Mr. Crompton, we resolved to discover how far phrenology would detect and demonstrate the leading peculiarities of his mind. To this end the bust was submitted to the manipulation of the late Mr. Bally, who was then practising his profession of phrenologist in Manchester. knowledge of the person it represented being carefully concealed from him, he was desired to give a candid written opinion of any peculiarity of character he could draw from the extraordinary development of some, and the smallness or absence of other organs. After a few days the bust was returned, and with it a large sheet, on which the various faculties and their organs are described, at too great length to be recorded here;197 but the letter from the phrenologist will suffice to explain his opinion of the original of the unknown bust. Mr. Bally, we may remark, was an Italian, and wrote very indifferent English. The note is dated from 7, Victoria-street, Manchester, 15th June, 1853:

¹⁹⁷ For details of Mr. Bally's phrenological report upon the bust of Samuel Crompton, see Appendix No. X.

"Sir, - Having examined the bust, I find a development with good perceptive, and rather large reflective. Fully good domestic economy. In the moral sentiments the large organ I find [to be] hope, with conscientiousness. This leads the character to scheming. With constructiveness being large, it gives mechanical invention. In short I have given you all the organs. Decided development [of] each organ. Then an explanation. The cast is very bad [ly] executed. It has the appearance in the neck of one [who had] committed suicide, but [with] such organization it would be impossible to do so - except [from] derangement. Be so good as to give an answer respecting the character. I don't know the character.

> Yours respectfully, Wm. Bally."

Mr. Bally was greatly delighted when told whose bust he had examined. Very soon afterwards he was struck with paralysis, and endured a kind of living death until about a year ago, when Providence released him from his earthly troubles. He was another example, like our

hero, of intellectual genius, worn out by active speculation, yet altogether unable to cope with the common-place incidents of ordinary life.

Samuel Crompton's funeral was attended by his sons and grandsons; and the burial service read, in the absence of Canon Slade, Vicar of Bolton, by the Rev. Mr. Fogg. There were many voluntary mourners. Some of the most honoured names known in the town may be found in the list of those who attended to see his body committed to the dust. Far too numerous to be received in his own humble dwelling, the parlours of the neighbouring houses were opened for their reception. Isaac Dobson, Peter Rothwell, Benjamin Hick, Thomas Cort, James Taylor, Benjamin Dobson, William Crompton, Pitt Hewitt, Thomas Howell were but a few of those who by their presence on that solemn occasion offered their testimony to his worth. 198 We think it right to record the names of these Bolton worthies, all of whom in their turns have been committed to their last mortal resting

¹⁹⁸ Dr. Black and Mr. Moore, his two medical friends, are happily able to give evidence of their estimation of him whose body they also followed to his grave.

places. They did honour to themselves in recognizing the merits of Samuel Crompton when struck down and overwhelmed by adversity. They saw his body placed in a grave near the centre of the parish church-yard, where it remains undisturbed by any after interment, under a modest flag-stone placed there by his family, upon which is inscribed these words: "Beneath this stone are interred the mortal remains of Samuel Crompton, of Bolton, late of Hall-i'th'-Wood, in the township of Tong, inventor of the spinning machine called the Mule; who departed this life the 26th day of June. 1827, aged seventy-two years." The mourners and friends dispersed from the brink of the grave after taking a farewell look at the coffin containing all that remained of a man remarkable for his genius and his misfortunes. From that day, little has been said or thought of Samuel Crompton. Men have been content to

¹⁹⁹ There is an unaccountable mistake in his age, as engraved on his gravestone. Born on the 3rd December, 1753, and dying 26th June, 1827, he was in his seventy-fourth year, or exactly seventy-three years six months and twenty-three days old.

employ his great invention for their individual profit, and for the benefit of the human race, but the memory of the inventor has passed from the public mind almost like the shadow of a summer cloud. The older manufacturers of the country have been for the most part naturally willing to forget the man to whom they were so greatly indebted, because they could not remember him without taking shame to themselves for the injustice and ingratitude with which he had been treated.

We have now related to a younger generation of his townsmen the story of Crompton's eventful life, simply but faithfully. Let us hope that his memory may yet be revived, and his name worthily honoured, not only in his native parish but reflected thence over the world, which his invention has done so much to civilize; and that History may yet inscribe the neglected name of Samuel Crompton on one of the brightest pages of her annals.

CHAPTER XIX.

Statistics. Retrospect. Barkstead's Patent. Paul's Patent. The Jenny, Water-frame, and Mule. Steam-engine wedded to Cotton Machinery. Vast results. Dearth of Cotton Wool. Probable use of Electricity in Cotton Manufacture. Unintentional Tributes to the Genius of Crompton. The tall chimney that marks the site of the Hall-in-the-Wood. The centre of the Cotton Trade. A great Manufactory of Mule Engines. Minerva honoured. Crompton's Memory neglected.

Although reluctant to annoy our readers with a long string of tiresome statistics, we yet feel bound to recapitulate in the briefest manner the great facts of the Cotton manufacture, and to notice the more prominent footprints of that gigantic system, particularly that marked by the seven-league boot which Samuel Crompton bestowed upon it, striding as he did over the difficulties of space and time, in a manner infinitely more marvellous than those of the renowned fairy tale.

Except for candle-wicks, for which use it was imported during the middle ages, cotton wool was not employed as a material for manufacturing very long before the year 1641: Lewis Roberts, in a treatise entitled "The Treasure of Traffic," published in that year, speaking in commendation of the men of Manchester, says: "Neither doth their industry rest here, for they buy cotton wool in London, that comes first from Cypress and Smyrna, and at home work the same, and perfect it into fustians, vermillions, dimities and other such stuffs, and then return it to London, where the same is vented and sold, and not seldom sent into foreign parts, who have means at far easier terms to provide themselves of the said first materials." 200

Fifty years later (1691) an attempt was made in London to manufacture cotton fabrics of the same delicate description as were then imported from Asia. In furtherance of this purpose a patent was granted for fourteen years by William and Mary to "John Barkstead of our citty of London, merchant," for "a new invention of makeing of callicoes, muslines, and other fine cloathes of the sorts out of cotton wool of the growth and product of our plantations in the West Indies to as great a perfection as those

²⁰⁰ pp. 32-3.

that are brought over and imported hither from Calceut and other places in East India." This patent contained a clause very favourable to John Barkstead, dispensing with any specification or the enrolment of any description of his process. He is authorized to enjoy the privileges of his patent, "notwithstanding the not full and certaine describeing the nature of quality of the said invention, or of the materialls thereto conduceing and belonging." ²⁰¹

Whether this patent related to any new process of spinning or weaving, or referred merely to the first importations of West India cotton, we have been unable to ascertain, but that nothing of much importance resulted from it may be gathered from the fact that twenty years later (1710) the entire quantity of cotton wool imported did not exceed 715,008 lbs.²⁰²

²⁰¹ At a meeting of the Archæological Association, June 8th, 1859, Mr. Baskcom exhibited the original patent granted to John Barkstead by William and Mary in 1691. To this instrument a fine impression of the great seal in yellow wax is dependent.— Athenæum, June 18th, 1859. The particulars of the patent were obtained from the printed copy (No. 276) of the series of patents in the Bolton Free Library.

In 1738 Lewis Paul obtained his patent "to make, use, exercise and vend a new invented machine or engine for the spinning of wool and cotton in a manner entirely new;" and twenty years afterwards (1758) he procured a second patent for the same system, which was perseveringly carried on for upwards of a quarter of a century in Birmingham and Northampton, supported by men of capital, influence and education.²⁰³ Nevertheless it did not succeed. Many families who had engaged in the process were reduced to poverty and distress. At the time at which the system was discontinued (about 1764) the importation of cotton wool was 3,870,392 lbs.²⁰⁴

About 1767, and almost simultaneously, Hargreaves invented the Jenny, and Highs and Kay were at work endeavouring to re-invent

²⁰² (Page 234.) Baines's History of the Cotton Manufacture, p. 346.

²⁰³ Dr. Samuel Johnson, the literary giant of the time, taxed his great powers of composition to prepare the draft of a letter to be addressed by Lewis Paul to the Duke of Bedford, soliciting his patronage of the newly-invented machine, which spun without fingers.

²⁰⁴ Baines's History of the Cotton Manufacture, p. 346.

the Roller principle, when Arkwright took it out of their hands and completed it; the import of cotton being in that year about 4,000,000 lbs. From 1767 until 1780 the increased importation was gradual, and then amounted to 6,766,613 lbs.,²⁰⁵ under the influence of Hargreaves and Arkwright's new and successful machinery.

In 1780 Crompton's Mule was given to the nation, and its effect was to increase the import of cotton wool in the eighth year afterwards (1789) to 32,288,186 lbs.!!! Or to put the increase in another and still more striking light:—During the period from the years 1771 to 1781, which may be called the era of the Jenny and the Water-frame, both of these machines being matured and in full operation, the increased consumption of cotton wool was seventy-six per cent; while from 1781 to 1791, the era of the infancy of the Mule, the increase was three hundred and twenty per cent!!! 206

Without underrating the importance of other inventions, and making full allowance for the

²⁰⁵ Baines's History of the Cotton Manufacture, p. 346.
²⁰⁶ Ibid. p. 348.

magnificent results produced by scientific improvements in bleaching, dyeing and printing—above all by the introduction of the steamengine, which imparted motion and almost vitality to them all, we may safely assert that Crompton's invention is the fulcrum which sustains that mighty lever the Cotton Trade, the most valuable and the most powerful of our national resources.

We willingly abstain from further statistics beyond this statement, that in the year 1856 the quantity of cotton wool spun in Great Britain was 895,115,000 lbs.,207 upon 28,010,217 spindles.208 What number of these were mule spindles we are unable to ascertain; but as the jenny is now almost quite disused, and all the finer yarns are spun exclusively upon the mule, it must be evident that year by year its importance and value continue to increase.

All this extraordinary and eventful progress, which by God's providence has been a great means of promoting the civilization and increas-

²⁰⁷ Lectures on the Cotton Trade by Mr. Alderman Baynes, of Blackburn (1857), p. 45.

²⁰⁸ Ibid. p. 48.

ing the material comforts of the human race, has been accomplished in the comparatively short space of eighty years. During that time the principle of Crompton's invention has remained unchanged. Modifications, improvements and auxiliaries have increased its productive power a hundred fold, yet no one dare say that it has even yet arrived at the summit of its usefulness. During the first ten years of its existence, its infancy was carefully tended by the human hand; then for a time it was nursed and hastened in progress by water power; but that also soon proved insufficient for the demands made upon it, and Steam came to its aid, lifting the water back again to duplicate its work in turning the young machinery. But steam was not long employed in this merely secondary office. The art of cotton spinning had grown into the dimensions of a youthful giant, and demanded the alliance of an equally gigantic helpmate. As the powers and capabilities of the Steam-engine became developed, they were laid hold of by the cotton spinner, loaded with fetters, and riveted to his machinery. This union raised the art to a

power so stupendous that it demanded an immense increase of material to operate upon. The old sources of supply could no longer provide an adequate quantity of cotton wool for its vastly increased appetite, and the Southern States of North America planted their most favoured soils with the cotton shrub, and sent unnumbered millions of bales of cotton wool as sustenance for the gigantic pair. But all in vain; they are still hungry, still craving for more, and the entire tropical world is now being eagerly ransacked to find them food.

Not content with the steam-engine, man is now invoking the assistance of another and yet more powerful and subtle agent. Already it manipulates his delicate metal work, and carries his messages over the world with a force, celerity and precision beside which the most extravagant performances ever imagined for Eastern gnomes or genii lag far behind. Puck is but a tortoise or a crab compared with *Magnetism*, and the mythic Ariel a powerless sluggard by the side of *Electricity*. Men are daily watching the development of this power, and we hazard no unreasonable or unsafe prophecy in predict-

ing that they may employ it ere long in their processes for manufacturing cotton goods. By elaborate workings through machines of unearthly names, masses of cotton wool are disentangled and freed from accompanying dust and soil. No portion of the cotton machinery is more curious and intricate than the scutching and carding engines, yet it is not impossible that their best work may be eclipsed by a simple and instantaneous charge of electricity, which we know possesses the power to disentangle and separate fibrous substances with a minuteness of sub-division as far exceeding that of scutcher or devil as on the wires of the telegraph it outstrips in speed the railway train. By another modified charge of the same subtle power, the fine filaments of cotton wool may possibly be arranged, through the laws of polarization, intimately though mysteriously connected with electricity, in the same order as that which nature gave them in the seed-pod, with every torsion of every fibre in one and the same direction!²⁰⁹ If thus presented to its oper-

²⁰⁹ The microscope shows the fibres of cotton wool to be twisted in similar manner to a cork-screw. The twists

ation the mule would spin them into threads of tenacity, delicacy and lustre equal to the finest specimens of silk. We know that an inexhaustible supply of this mighty power exists latent in the earth beneath our feet, and in the clouds over our heads. We know, too, that it may be called into action of so potent a kind that while we invoke we dread it, and dare not attempt its application to many special purposes for which science predicts its fitness. It is not too much to expect that in God's good time some Hargreaves, Watt, or Crompton may be permitted to harness this subtle spirit, and voke it, like its kindred natural elements, to the machinery which man employs to clothe his fellow-men. All the giant footsteps which invention and science have already made in cotton

of all the fibres are also known to be in the same direction. Could they be retained in their natural parallel position, they would, when spun, cling closely together, all the points twisting inwards; but in practice this is disregarded. They are so spun that one moiety of the ends point outwards.—Vide Remarks on the Mechanical Structure of the Cotton Fibre, by Gilbert J. French, 1857; published also in the Journal of the Society of Arts, vol. v. pp. 615-618.

machinery, and, it may be, those still greater — for as they advance they ever increase in magnitude — which we have ventured to predict, will have left their footprints on the earth within the limits of two not very long lives. But as time passes away we take no means to make these impressions permanent; and to another generation they may be entirely obliterated.

Near the Hall-in-the-Wood rises one of those octagonal columns so common in the manufacturing districts, which serve as visible symbols of the industry that surrounds them. The chimneys in and about Bolton are very numerous, and many of them are of great height, but all dwindle into pigmy dimensions compared with that near Crompton's former residence,²¹⁰ which shoots up into the sky to the height of three hundred and sixty-six feet (by far the loftiest

²¹⁰ This chimney, said to be one of the highest in the country, was first built to carry off the fumes from adjacent chemical-works; but as it merely diffused the nuisance over a larger area, the works have been discontinued. It now serves as the draft or smoke chimney for extensive spinning mills, an iron foundry, and a large engineering establishment for mules and their preparatory machinery.

structure in the district), and attracts to it every wandering eye in the surrounding country. Unintentionally it has become a conspicuous landmark, indicating with power and precision the site of our hero's invention. Built for an entirely different purpose, the principal use of this tall and really graceful structure is in connection with numerous steam-engines and furnaces in a huge factory,211 where some thousands of men and boys are employed in making mulespinning machinery, not merely for the supply of the district or of the nation, but to be distributed through all the empires of Europe, and even to the skirts of civilization in Africa; for wherever the humanizing effects of their industry have become known, Crompton's mules and their accessory engines are welcomed and cherished. Thus another unintentional tribute to the honour of their inventor is perpetuated by the weekly production of thousands of mule-

²¹¹ This immense establishment, in which spinning machinery (and particularly Crompton's mule) is constructed with every modern improvement, is the property of Messrs. Dobson and Barlow, whose ancestors' names are intimately associated with Crompton's history.

spindles almost on the spot of their invention; propelling with regularity, as from a mighty heart, the life-blood which circulates through and sustains this stupendous system of manufacture. And, as if Providence compensated for the neglect of man, another curious fact appears to do additional yet unintended homage to the genius of Crompton. Hall-in-the-Wood is the veritable centre, core, or heart of the existing cotton-manufacturing district. Could we tie a cord twenty miles in length to the top of the tall chimney that marks the spot, and sweep it round the country, the circle thus formed would be found to embrace the populous towns and teeming villages engaged in spinning and weaving cotton. They radiate from that centre, like the points on the mariner's compass, and with a corresponding closeness and regularity.212

To this small spot of earth (remarkable only the other day for nothing beyond the sterility of its surface) and to its indefatigable inhabitants Providence appears to have assigned the

²¹² Of these, Manchester, Preston, Oldham and Blackburn may be called the cardinal points.

particular and special duty of clothing mankind. In furtherance of this work they have dragged to the surface much of the mineral wealth which it contained, and have perforated it with thirty miles of subterranean canals, and countless miles of buried railways They have crusted over its surface with factories and mills, each of which is in truth a miracle of industry, unexampled elsewhere. Wealth, which can scarcely be reckoned, is represented by millions of spindles, which with their auxiliary engines, are revolving day by day. The land on which they stand has been quadrupled in value. Within no other similar space is there a greater development of the system of railways which spread over it like a close net-work of iron, and it is covered with a conglomerated mass of towns and villages, so large and so closely set together that in many instances their longer streets meet each other, and populous places said to be seven miles asunder are really connected by continuous rows of gas lights.

Many great and active minds have been at work to produce this unprecedented result; but to one more than to all others collectively, it is due. It was the mind of Samuel Crompton which, under Providence, vivified this crowded area, and now fills it with a vitality not the less true that its action is unseen and unacknowledged. We have sought carefully but fruitlessly for some reasonable apology, but we can suggest no excuse for the unmeasured ingratitude of the people of Great Britain in their neglect of the person and memory of that man (we state it advisedly) who has been the means of diffusing more material good over the surface of this globe than any other human and uninspired being that ever dwelt upon it.

APPENDIX.

No. I. — Page 21.

EXTRACT from "A WEDDING RING fitted to the finger of every pair that have or shall meet in the fear of God, or that Divine Circle of Heavenly Love wherein Man and Wife should walk all their days." By William Crompton. 4to London 1632. (In the Bodleian Library, Oxford.)

"Who hath or can find such a woman? Herself is portion enough. She passes her weight in gold. Her dwelling is a representation of heaven. Oh! happy man, and therefore happy because husband of such a wife, who brings joyful content to his heart, and delight to his eyes, glory to his head, and helps to keep a continual feast. Adam might have had a garden - no Paradise without Eve; man is imperfect without a wife, unhappy without a good one; what the heavens have been thought to be above him and his soul within him, that indeed is a virtuous wife about him. Like well-tuned virginals, her life is perfect music; no harsh sounds or jarring strings in her breast. If she entreat, it is with humility; if she complain, it is with tears; if she chide, it is with smiles; how can she displease whose harmless thoughts are still intent to please? He hath put off nature that finds no content in such a turtle; not to acknowledge such a helper argues want of grace; let him seek her that wants one, let him mourn that has lost, let him praise her that enjoys one."

No. II. — Page 23.

AWAY WITH GRIEF.

From Hugh Crompton's Pierides, or the Muse's Mount, 1658.

Away, thou gnawing worm, fond grief!
Away from me, away!
Thy absence is my sweet relief;
Then flee, without delay.
He that gives way to woe and sorrow,
May grieve to-day and mourn to-morrow.

Go now unto another zone,
Where mortal brains are light,
And press them down; — I've need of none,
Since I have felt thy weight:
He that shall change his frown to laughter
May laugh to-day, and sing hereafter.

I tried you both, and knew you well,
But do not like you so;
A light heart has no parallel,
But oh! the pangs of woe!
Yet woe the heart can never shoot,
If thought be not the porter to't.

Suppose you, then, that all is good,
And in that thought repose;
This will allay that fiery blood
Which in thy body flows:
And mark me now — for this is chief —
Nothing on earth requireth grief.

If accident should chance to fall,
It falls from Heaven above;
Then let no poverty or thrall
Your soaring spirits move:
Nothing but sin can grief require;
Then grieve for sin, — else, grief, expire.

No. III. — Page 57.

SOME ACCOUNT of LEWIS PAUL and his Invention of the Machine for Spinning Cotton and Wool by Rollers, and his claim to such invention to the exclusion of John Wyatt. By ROBERT COLE, F.S.A.*

[Read by Mr. Cole in Section G of the British Association for the Advancement of Science at its meeting held at Leeds in September 1858.]

Mr. Baines in his valuable History of the Cotton Manufacture states that Sir Richard Arkwright was generally believed to have invented the mode of spinning by rollers, but that the process had previously been described in the specification of the machine invented by John Wyatt. Mr. Baines further states that the patent for the invention was taken out in 1738 in the name of Lewis Paul, a foreigner with whom Wyatt had connected himself in partnership; that the name of John Wyatt only appears as a witness. Mr. Baines then proceeds to set out the evidence in support of the claim on behalf of Wyatt to the invention.

^{*} The copyright of this paper is reserved by Mr. Cole.

This claim, I may here remark, is founded solely on statements furnished by the members of John

Wyatt's family.

Some ten or twelve years previous to the publication of Mr. Baines's *History*, Mr. Richard Guest, in his work in disproval of the claim of Sir Richard Arkwright, says: "In 1733 a Mr. Wyatt, of Lichfield, invented a machine for spinning cotton, and two factories were built and filled with his machines, one at Birmingham and one at Northampton; both undertakings failed," &c.

Misled by this paragraph and by the speciousness of the Wyatt statements, and in the absence of evidence to the contrary, it cannot be a matter of surprise that Mr. Baines adopted the claim which had

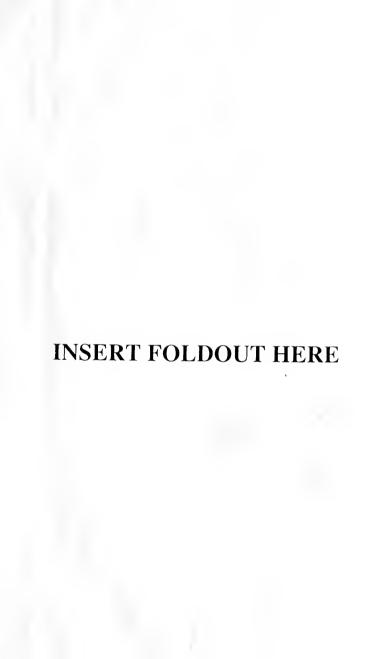
been so ingeniously made.

The object I have in now bringing this subject before you is to disprove the Wyatt claim, and to prove, as I doubt not I shall do most clearly and conclusively, that to Lewis Paul alone must be awarded the merit and honour of being the sole inventor of the machine for spinning cotton and wool by rollers, and that Wyatt had nothing whatever to do with the invention, or the carrying it into execution, beyond that of advancing money to Paul, and his being a workman in Paul's employ at weekly wages.

I purpose also to give some account of Paul, of whom, in a foot-note, Mr. Baines says: "This remarkable man, of whom so little is known except the surprising inventions for which he obtained patents, lived at Birmingham in 1738 and 1748, and

at Kensington near London 1758."

Some years ago I added to my collection the patents and papers of Lewis Paul (two or three deeds, the probate of his will, and a few papers had





previously passed into other hands). Amongst them I found several hundred letters addressed to Paul. There were thirteen letters of Dr. Samuel Johnson, about twenty of Edward Cave the editor of the Gentleman's Magazine, thirty or forty of Dr. Robert James of fever-powder celebrity, and upwards of two hundred of Thomas Warren the Birmingham bookseller, nearly all relating to the machinery. There were also letters of John Wyatt, James Johnson, Yeoman, Touchet, Morris, Bourn, Redshaw the foreman of the works, and others.

By the possession of these papers I am enabled to

give a few particulars of Paul's early life.

Paul was the son of a Dr. Paul, (but whether a foreigner or not does not appear —I incline to think from the letters he was not so.) Lewis was very young when his father died; he was left by his father under the guardianship of Lord Shaftesbury and his brother the Hon. Maurice Ashley Cooper. No mention is made when Dr. Paul died, but it must have been previous to 1713, as in that year the Earl died. In February 1728, Paul married Sarah Meade (whose maiden name was Bull) the widow and executrix of Robert Meade a solicitor at Aylesbury, and who had been the solicitor of the notorious Philip Duke of Wharton. Paul by his marriage acquired some property in addition to what he previously possessed, and his wife dying September 1729, he took letters of administration of her personal estate and also administration de bonis non of Meade the first husband, and as such administrator Paul filed a bill in chancery against the Duke's representatives in respect of a promissory note for £400 given by the Duke to his solicitor Meade.

From 1729 to 1738 (when Paul took out his first patent) I find no trace of his proceedings except that

he had invented a machine for the pinking of crapes, tammys, &c., for burying suits or shrouds, in carrying on which he had made considerable profit; and a daughter of Dr. Swynfen (Johnson's friend) was a pupil of Paul's, to learn the art of pinking. Miss Swynfen is better known to us as the Mrs. Desmoulins, one of Johnson's poor protégés in after life. For a considerable time after Paul had obtained his patent for spinning cotton he appears to have carried on the pinking business, for there is among the papers a copy of a license granted by him to Eleanor Steadman to use the pinking machine in consideration of £200. This deed is dated 19th August 1742.

That Paul was engaged during a large portion of the time between the death of his wife and the obtaining his first patent in experiments and trials for the completing his spinning machine there can be no doubt; but of such experiments and trials there are no particulars to be found among the

papers I possess.

The first patent for spinning cotton and wool granted to Paul is dated 24th June 1738, and is for fourteen years. It commences with a recital of Paul's petition for the patent, very long and very different from petitions in after time. It is as follows: — "Whereas our trusty and well-beloved Lewis Paul, gentleman, hath by his petition humbly represented unto us that after many essays made by him for the space of several years last past, and at a very great expense, he hath invented a machine or engine for the spinning of wool and cotton in a manner entirely new, and in such sort as the same will not only be of great use to the manufacturers in the woollen trade, but will also considerably improve the manufacture itself, and afford employment for a great number of poor people, who at present are generally useless to the kingdom and often a burthen thereto. That by all or any of the present methods of spinning it is extremely difficult to spin yarns of the several sorts or any of them to such a degree of size or twist as may be wanted for any particular work; on which account whenever a clothier has occasion for a parcel of yarn to be spun to any particular degree of size or twist he is obliged to have a much greater quantity spun than he then wants of that particular size or twist, in order that among the whole he may pick out so much as will answer the present occasion, by means whereof the remainder often becomes a dead stock upon his hands for a considerable time: and for the reasons aforesaid the poorer part of the clothiers are frequently rendered incapable of serving their customers from an inability to keep a large stock of the various sizes and sorts of varn by them, and often where goods are required to be made in great haste they are obliged to use such sort of varn as they have by them, or can then get, though of different sizes and degrees of twist, which often occasions the said goods to be unsuitly, and the weavers are often forced to remain unemployed for want of such particular sized varns as are suitable to their occasions. That the said machine or engine is capable of being set so as instantaneously to spin wool, cotton waste, silk and wick varn to any degree of size or twist with the greatest exactness, and is to be worked without the handling or fingering the matter to be wrought after the same is once placed in the machine, and requires so small a share of skill that any one after a few minutes' teaching will be capable of spinning therewith, and altering the same to greater or less and to any degree of size or twist as often as he shall think fit, and can also do the work with greater expedition than by any of the

methods now in use; and even children of five or six years of age may spin with the same, by which means the poorest of the clothiers will be enable to supply their customers without suffering under the incumbrance of a dead stock of yarn, and the weavers may be supplied with such yarn as they shall want for their several occasions without that loss of time which often happens to them in staying till they can have a sortment to answer their several purposes. The petitioner therefore hath humbly prayed us that in regard to the great advantage which may arise to the kingdom from his said invention and the expenses and many years labour he has been at to render the same perfect and complete, we would be pleased to grant unto him our royal letters patent for the sole use and benefit thereof to him and his assigns for the term of fourteen years; we being willing to give encouragement to all arts and inventions which may be for the public good, are graciously pleased to gratify him in his request. Know ve therefore," &c.

I must here take leave to observe that at that period, and down to the present time, on an application for a patent an affidavit (now a solemn declaration) was necessary to be made, setting forth the heads of the invention, and concluding with the words: "And this deponent further saith that he is the first and true inventor thereof, and that the same hath never been made or used by any other person or persons to the best of this deponent's knowledge and belief." So that Paul must have perjured himself if he had not been such "first and true inventor."

Whilst Paul was getting up his machine he was obliged to borrow money, no doubt for the expenses of his experiments and the taking out of the patent. Thus he borrowed rather largely of his friend War-

ren the Birmingham bookseller, to whom he gave bonds to secure the repayment. He also borrowed money of John Wyatt, as will appear hereafter: £200 also from Miss Swynfen, and various sums of money from Dr. Robert James and other persons, for which he gave bonds (afterwards repaid, and the bonds given up and cancelled); but on obtaining the patent he began to grant licenses for spindles, and received considerable sums for the grants. In May 1739 he granted a license to James Johnson the Spitalfields weaver (the person mentioned in Wyatt's statement) for ten spindles in consideration of £50. afterwards increased by three other licences to 150 spindles, and it is worthy of remark that this deed of May 1739 is signed by John Wyatt as an attesting witness. In this deed the patent is shortly recited. and the machine is referred to as "invented by the said Lewis Paul," and Paul covenants to erect and put up the machine. We may infer, therefore, that Wyatt, as Paul's workman, was then present to commence the work, and this will account for Wyatt's statement in Mr. Baines's History in the years 1739 and 1740, "I was almost daily at Mr. Johnson's in Spitalfields." And there is a letter to Paul from Johnson, dated January 1739-40, in which he says: "I have agreed for a throwster's shop to put the spinning wheels in. Mr. Wyatt has made a few alterations in the cylinder, I hope for the better," with this postscript: "Pray order the deed to be delivered to me or Mr. Wyatt, that it may not come to father's hands first." There are other letters from James Johnson to Paul, also relating to the spindles.

In April 1740, Paul granted a license to Warren for fifty spindles, in consideration of the debt owing

to him, amounting to £1,000.

Paul also granted a license to Edward Cave for working two hundred and fifty spindles, in consideration of a large sum; also licenses to Dr. Robert James and other persons; and by such grants he realized several thousand pounds.

I cannot refrain from introducing here an extract from a letter written by Dr. James to Warren, dated

London 17th July, 1740: -

"Yesterday we went to see Mr. Paul's machine, which gave us all entire satisfaction both in regard to the carding and spinning. You have nothing to do but to get a purchaser for your grant; the sight of the thing is demonstration enough. I am certain that if Paul could begin with £10,000 he must or at least might get more money in twenty years than the City of London is worth."

How truly we may say has this remarkable prediction (though not within the limited period) been

fulfilled.

It now becomes necessary for me to allude more particularly to John Wyatt, and his connection with

Paul and the spindles.

The patent, it will be remembered, bears date 24th June, 1738, and at that period Paul was indebted to Warren in a considerable sum. In October of that year Paul (when in London) applied to Warren for the loan of another £50, and Warren wrote him in reply 21st October, 1738: "I can't pretend to judge of your affairs, but did not, I must own, expect another pressing instance so soon, especially as Mr. Wyatt furnished money for the purposes of the machine, which I think you told me he did." Here then we see that the machine was Paul's, and that Wyatt had advanced money to enable him to go on with it. Wyatt continued to make advances either by loans to Paul or payment of monies for

him. He had also demands for work done, and for weekly wages; they amounted altogether to upwards of £800. Wyatt, it should be stated, was a carpenter, and his letters (of which there are several) and letters of other persons, show he was a workman in Paul's employ, or an assistant to him in putting up the machines for which Paul had granted licenses. The following letters may be sufficient in proof of this fact:—

"London, Thursday, August 14th, 1740.
"Sir, — Our wire nose and fine work both mend upon us, every Bobby full, but hope the particulars

will be more entertaining in my next.

"I now think it almost impossible ever to get the wool off the card by the means we have attempted, for by the time the first rows are off they will touch the tails of their next fellows, which touch will pull them off the needles in our present situation. I likewise find it very difficult to make a stroke of that length when the card is near the perpendicular, or indeed in any sitting posture. But having tried it in various situations, find it best when laid aslope — a little lower than a mean between the upright and flat, and standing without anything to lean against, can make the stroke pretty easy and quick.

"And it seems to me as if some advantage might accrue from the situation itself. If we should reduce the eighteen rows of teeth to sixteen, and to take them off at four times, the ribbons might lie behind each other more compactly than at present, and the directions that the needles might then be set in would have a greater probability of taking the wool off. Perhaps you'll understand me better by the little sketch inclosed, where a a is the teeth of the card, b b &c. the needles and frame, c c &c. the shelves on which the ribbon slides, d d &c. the

ribbon rolls. I have just thought of this, but believe I shall think further of it till I receive your approbation or other commands, which will be faithfully observed by

Sir, your humble servant,

"Mr. Paul, in the Square, JNO. WYATT."

Birmingham."

"Monday, August 17th, 1741.

Sir, — Presuming you will see Mr. Yeoman nearly as soon as this letter, I need say no more upon the work, but that they have this day determined to pursue the making of steel pinions and steel pushes (especially for the wheel arbore) with the utmost expedition, in order to repair the work that fail the fastest.

"If 'tis convenient to help my wife to two or three guineas before you leave the town, 'twould be a favour to

Sir, yours, &c.,

"Mr. Paul, at Mr. Victor's, JNO. WYATT."

Pall Mall, London."

"Birmingham, December 9th, 1741.

"Dear Sir, — Last night Wyatt told me he intended to settle in Birmingham, and have his wife from London, that the business he designed to follow would let him have leisure to superintend your work, which he could then afford to do for a trifle. You know him much better than I do, but I am far from thinking his superintendence of any great consequence, and when the calculations and table are finished I cannot conceive he will be of any service to you though you continue in London, but this you know best.

I am, dear sir,

Sincercly yours,

"Mr. Paul, at Mr. Victor's, SAM GARBETT."

I proceed now to show how Wyatt became possessed of the three hundred spindles mentioned in the Wyatt statements inserted in Mr. Baines's

History.

It has been before mentioned that Wyatt had demands on Paul, amounting to upwards of £800. There were accounts between them, as is evidenced by the following letters:—

"Birmingham, Monday, March 22nd, 1741-2.

"Sir, — Though I intended you this before now, perhaps shall be less impertinent without prefacing

with the reasons that have detained me.

"If Mr. Paul will please to allow my accounts, and pay the balance, with what more may become due till the time he thinks fit to dismiss me and give me a mortgage or such other instrument as shall immediately entitle me to three hundred spindles upon the expiration of the term, I will accept it for twelve months suspense, and shall be ready to serve him in any of those little offices that remain in my

power.

"But the money is what I want, or at least 'tis what would please me best at present. But to be plain, I am in some doubt of having the money of Mr. Paul, and if spindles must at last be my share I would willingly have as many as would attach my sole attendance. 'Tis with this view that I suspend my late designs. I therefore hope to find Mr. Paul at the expiration of the term ready to assent without reluctance, and rather be assisting than retarding my prosecution of such a work. I make Mr. Paul debtor as on the other side, and if he please to fill up the blanks from his own accounts, or at his own discretion, he will see the balance. This part I leave

entirely to his own discretion, being assured it is not five or ten guineas that will discontent me on this head. I shall send the account at length by Timmins to-morrow, directed to Mr. Dobbins, and am,

Sir, your most obedient

humble servant,

JNO. WYATT.

Dr. Mr. Paul.
£ s. d.
To sundries paid ... 253 19 7½
51 weeks wages,
at £3 3s 160 13 0

"To Mr. Dobbins, of a man
Attorney-at-Law in
Castle Yard, Holborn, London."

"Sir, — One reason why I send these papers in this dirty way is that part of them is the original which was kept in the pocket, and indeed all the book I at that time kept an account of Mr. Paul. I apprehend it may be full as satisfactory as a correct copy, and that it will be intelligible, which is the most material point with,

Sir, your obedient humble servant, JNO. WYATT.

"There is besides this account some small balance between me and Mr. Paul, commencing from the date of the bond to the beginning of this account, viz. September 30, 1740, but I can't tell in whose favour it would fall, exclusive of my note of hand for £16 (I think), which I should be glad to pay when the bond is paid. I have had several close dunns since I saw you, which excites me again to repeat that the money between this and the next term would be most agreeable to me. I have likewise confessed a judgment to Mr. Ward and Moor, two of my creditors, whose sums amount to about £120.

"To Mr. Dobbins."

There is another letter from Wyatt to Paul, dated 5th April, 1742, pressing for security for the debt owing to him. It concludes with this sentence: "I can't help being in some measure ashamed of the office I bear under you, and that I can be of no more

service for the wages I expect."

The mortgage alluded to by Wyatt in his letter of the 22nd March, 1741-2, was accordingly prepared. It bore date 4th June, 1742, and was made between Paul of the one part and Wyatt, therein described of Welford in the county of Stafford carpenter, of the other part. After reciting that George II. by letters patent of 24th June in the twelfth year of his reign gave and granted unto said Lewis Paul, his executors, &c., his especial license, full power, sole privilege and authority that said Lewis Paul, his executors, &c., and every of them by himself and themselves, or by his or their deputy or deputies, servants or agents, or such others as he the said Lewis Paul, his executors, &c., should at any time agree with and no others, from time to time and at all times thereafter during the term of years therein expressed, should and lawfully might make, use, exercise and vend a machine, engine or invention "invented and made by the said Lewis Paul for the spinning of wool and cotton in a new manner," within that part of the kingdom of Great Britain called England, &c., in such manner as to him the said

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Lewis Paul, his executors, &c., should in their discretion seem meet, and that said Lewis Paul, his executors. &c., should and might lawfully have and cnjoy the whole profit, benefit, commodity and advantage from time to time coming, growing, accruing and arising by reason of the said invention during the term of years therein mentioned have, hold, exercise and enjoy the said license, power, privileges and advantages thereinbefore granted unto said Lewis Paul, his executors, &c., for the term of fourteen years from the date of the said letters patent. It was witnessed that in consideration of £820 paid to Paul by Wyatt, Paul gave and granted unto Wvatt, his executors, &c., full license, power, privilege and authority that he the said John Wyatt, his executors, &c., and every of them by himself or themselves or either of them or his or their or either of their deputy or deputies or servants should or might at their or his own proper costs and charges make, erect and set up, or cause to be made, erected or set up in any city, town or place within that part of Great Britain called England, the dominion of Wales and town of Berwick-upon-Tweed three hundred spindles for the spinning of wool and cotton according to the said new invention of the said Lewis Paul, the said spindles to be disposed of in such a number of machines as said John Wyatt, his executors, &c., should think fit. And that said John Wyatt, his executors, &c., and every of them should or might use and employ said spindles to and for his and their own proper use and benefit for and during all the residue and remainder of said term of fourteen years in and by said letters patent granted to said Lewis Paul as aforesaid, then to come and unexpired, in as full, ample and beneficial manner to all intents and purposes as said Lewis Paul could or

might use and employ the same in his own proper person.

Then follows a covenant by Paul, which I give at

full length: -

"That he the said Lewis Paul shall and will whenever he shall be thereto requested by the said John Wyatt, his executors, administrators or assigns or any of them, or within six months next after such request made give unto the said John Wyatt, his executors, administrators and assigns, agents or workmen, or unto such of them as shall so request the same, the same plan for erecting, making and perfecting proper machines or engines and spindles for the spinning of wool or cotton according to the grant and license hereinbefore contained, which he the said Lewis Paul hath already gone by or which at any time hereafter during the residue of the said term of fourteen years by the said recited letters patent granted as aforesaid, he shall go by, in or for the erecting, making and finishing such machines, engines or spindles as he the said Lewis Paul shall erect, make and finish for his own use. And that he the said Lewis Paul shall and will give unto the said John Wyatt, his executors, administrators and assigns, agents and workmen, and every or any of them, such further instructions for the erecting, making and perfecting of the said machines or engines and spindles as shall be requisite and needful for the effectual working and managing the same. And also shall and will, upon the request of him the said John Wyatt, his executors, administrators or assigns within six months next after such request made give unto him the said John Wyatt, his executors, administrators and assigns, agents and workmen, or any of them, a plan of another machine which the said Lewis Paul hath lately invented and made for the carding of wool and other things for

the use of the before mentioned machine or engine for

spinning."

Surely if Wyatt had been the inventor of the spinning machine the introduction of a covenant like the foregoing would have been not only unnecessary but absurd. The deeds were executed in duplicate.

Wyatt executed the counterpart.

We have thus evidence of the manner in which Wyatt became possessed of the three hundred spindles mentioned in Mr. Charles Wyatt's letter (Mr. Baines's History, p. 135). About this time Wyatt was arrested for debt, and he surrendered to the Fleet Prison in June or July 1742. Whilst in prison he wrote the letter to Sir Leicester Holt, set out in Mr. Baines's History, p. 125; the letter contains this expression: "I am the person that was the principal AGENT in compiling the spinning engine;" and in the same page Wyatt, alluding to two hanks of cotton yarn spun about 1741, says: "It owed the condition it was then in to the superintendency of John Wyatt."

It is to be observed that Wyatt does not himself claim to be the inventor, but merely that he was the agent and superintendent; the claim to the in-

vention was set up by his sons.

Wyatt took the benefit of the Insolvent Act 15th September 1743, and the Clerk of the Peace for London executed an assignment of his effects dated 13th January 1747 to William Wyatt and Francis

Ward, two of the creditors.

Whilst in prison Wyatt entered into a contract with Samuel Touchet to assign to him Paul's grant of the three hundred spindles in consideration of £300; and in performance of that contract Wyatt's assignees, by deed dated 11th February 1747, assigned the spindles to Touchet, and on that occasion

Paul gave Wyatt £30, as appears by his receipt for that sum:—"July 21, 1748. Received of Mr. L. Paul, by the hands of Mr. T. Yeoman, the sum of thirty pounds, conformable to a promise of the said L. Paul that he'd make me a present of the above sum upon my creditors assigning to Mr. Touchet a grant or power of erecting three hundred spindles, which grant or power was some time made by Mr. Paul to me, and has since been assigned to Mr. Touchet. JNO. WYATT."

After Wyatt's discharge from prison in 1743 he occasionally assisted Touchet and his partner Bowker (with whom Paul had now connected himself) in putting up engines, and doing work which any other mechanic conversant with spindles might have done. Warren thus writes to Paul, 1st October 1744: "He (Wyatt) agrees to forward your work all in his power, and says he'll pay sufficient attendance, but will not attend it his whole time on any terms whatever. He is to have 20/ per week paid him, and allow the other 10/ towards the debt of £7."

Again, Warren says: "Twill be necessary for you to write such a letter of instructions as Mr. Wyatt may see. He says he must know at what rate to spin and what yarn. How many spindles to be furnished, if the frame must be proportioned to the whole number, and whether they must stand altoge-

ther; these are his own queries."

It may not be necessary for me to add any thing to what has been stated as to Wyatt's position with Paul; but it is worthy of remark that so little did Wyatt value the spindles and the machinery that in a letter dated 16th September 1757, addressed by him to Panton the person then managing the works at Northampton, he designated the articles "gimcracks." "You have herewith a reversion of old

gimcracks which by order of Mr. Yeo I am directed to send to you. I most heartily wish Mr. Yeo better success than any of his predecessors have had." Annexed to the letter is a list of the articles, including a large number of spindles weighing 15 cwt. 3 qrs. at 3s. 6d. per cwt., £2 15s. $1\frac{1}{2}d$. Had Wyatt been the inventor he would not have applied the term "gimcracks" to his own bantling.

In 1748 Paul obtained a patent for his carding engine, but no claim to that invention has been set

up by the Wyatt family.

The patent for spinning of 1738, being for fourteen years, expired in 1752: it does not appear that any

works were afterwards carried on under it.

Paul was, however, desirous of getting the machinery into the Foundling Hospital, as will be seen by the following letter addressed by him to the Duke of Bedford as president of the Foundling Hospital. The draft of the letter is in the handwriting of Dr. Samuel Johnson:

"My Lord, — As beneficence is never exercised but at some expence of ease and leisure, your Grace will not be surprised that you are subjected, as the general guardian of deserted infants and protector of their hospital, to intrusion and importunity, and you will pardon in those who intend, though perhaps unskilfully, the promotion of the charity, the impropriety of their address for the goodness of their intention.

"I therefore take the liberty of proposing to your Grace's notice a machine (for spinning cotton) of which I am the inventor and proprietor, as proper to be erected in the Foundling Hospital, its structure and operation being such that a mixed number of children from five to fourteen years may be enabled

by it to earn their food and clothing. In this machine, thus useful and thus appropriated to the public, I hope to obtain from Parliament, by your Grace's recommendation, such a right as shall be

thought due to the inventor.

"I know, my Lord, that every project must encounter opposition, and I would not encounter it but that I think myself able to surmount it. Mankind has prejudices against every new undertaking, which are not always prejudices of ignorance. He that only doubts what he does not know may be satisfied by testimony, at least by that of his own eyes; but a projector, my Lord, has more dangerous enemies, the envious and the interested, who will neither hear reasons nor see facts, and whose animosity is more vehement as their conviction is more strong.

"I do not implore your Grace's patronage for a work existing only in possibility. I have a machine erected which I am ready to exhibit to the view of your Grace, or of any proper judge of mechanical performances, whom you shall be pleased to nominate. I shall decline no trial; I shall seek no subterfuge; but shall shew, not by argument but by practical experience, that what I have here promised will be

easily performed.

"I am an old man oppressed with many infirmities, and therefore cannot pay the attention which your Grace's high quality demands and my respect would dictate; but whenever you shall be pleased to assign me an audience I shall explain my design with the openness of a man who desires to hide nothing, and receive your Grace's commands with the submission which becomes,

My Lord,
Your Grace's most obedient
and most humble servant."

What success attended this application we know not.

About this period, too, Paul addressed a letter to the then Earl of Shaftesbury, of which the first side of the sheet only is preserved:—

"My Lord, - Whether your Lordship remembers my name or not, I am persuaded that amongst the manuscripts of the late Earl your father you'll easily find traces of there having some time been such a person as Dr. Paul. I am the son of that person, and at my father's death had the honour to be left under the guardianship of the Earl your father and that of the Honorable Maurice Ashley Cooper your uncle. As it too often happens with young sparks I made but an ill use of my fortune and patronage. The latter indeed was much contracted by my Lord's going to Naples when I was very young. However, before the calamities I had laid the foundation for had reached me. I had exerted myself to the repair of my affairs with such ardour and success, that notwithstanding the various impediments necessarily in the way of a person who had spent his time in every circumstance so remote from the arts of trade, I nevertheless completed a machine of great value in one of the most extensive manufactories of the kingdom, and in a course of something more than twenty vears it gained me above £20,000 as patentee.

"But as in states, my Lord, so in private life there are not only vicissitudes but cabals, and success procures itself enemies as well as friends; even manufacturers are not insensible to the rivalship of excellence, though indeed much more so in its relation to interest than art, and combined reasons of this sort have prevented that general acceptance and appro-

bation which " -

With the word "which" the letter breaks off. The earl succeeded to the title on the death of his father in 1713, and died in 1771.

Meanwhile Paul made considerable improvements in his spinning engine, and in 1757-58 his solicitor submitted cases to the Attorney and Solicitor Generals Pratt and C. Yorke for their opinions as to a new patent being granted to him, but the invention being substantially the same as that for which the patent of 1738 was granted, both counsel were very guarded in their opinion, as one or the other might have to decide the question judicially; and it would appear that there were some difficulties in the way, for the petition for a new patent was not granted until after hearing counsel for Paul. The result however was that the patent was obtained; it bears date 1758, and here again Paul makes an oath that he was the sole inventor of the machine.

Paul did not long survive the grant of this patent; he died at Brook Green, Kensington, and was buried at Paddington the 30th April, 1759.*

Paul left a will dated 1st May, 1758, by which he gave an annuity of £8 to his servant Alice Morgan, his plate, linen, printed books, and £200; and an annuity of £200 to Jane Wright, wife of Henry Wright, apothecary; and the residue of his estate to Thomas Yeo of Gray's Inn, solicitor, with directions to take the name of Paul; in default of his paying the legacies and annuities and taking the

^{*} Burials in the parish of Paddington, in the county of Middlesex, in the year 1759:—

April the 30th, 1759, buried Lewis Paul, Esq., from Kensington parish, in Middlesex.

WILLIAM MOREL, Curate.

The above is a correct extract from the register of burials of the parish of Paddington.

J. W. Buckley,

Perpetual Curate of St. Mary's, Paddington.

name of Paul, then a bequest over to Henry Hadleigh, surgeon, subject to the same conditions; and upon failure on his part, then bequest over to the President of the Foundling Hospital for the time being, for the benefit of that charity, and he appointed said Thomas Yeo executor.

In accordance with the terms of the will, Yeo assumed the surname of Paul, but he soon afterwards left England greatly involved in debt; the machinery was distrained on for rent and sold, realizing but a small sum.

By the foregoing statement I have, I conceive, "placed the saddle on the right horse." I have shewn that the invention of the cotton spinning machinery was Paul's and not Wyatt's, and that throughout the whole period of their connexion, Wyatt never claimed to be, as indeed he never was, Paul's master or partner, but on the contrary considered himself to be and acted as a workman only.

It may be useful to add that the probate of Paul's will, the specification of the patent of 1738, and two indentures between Paul and Cave of 5th January,

1740, are in the British Museum.

No. IV. — Page 85.

AGREEMENT on which the Mule was surrendered.

Bolton, Nov. 20, 1780.

We, whose names are hereunto subscribed, have agreed to give, and do hereby promise to pay, unto Samuel Crompton, at the Hall-in-the-Wood, near Bolton, the several sums opposite to our names, as a reward for his improvement in spinning. Several of the principal tradesmen in Manchester, Bolton, &c., having seen his machine, approve of it, and are of opinion that it would be of the greatest utility to make it generally known, to which end a contribution is desired from every well-wisher of the trade.

£	s.	d.	£	s.	d.
Jno. Ridgway 1	1	0	Livesey & Har-		
Jno. Whitehead 1	1	0	greaves 1	1	0
J. & W. Fogg 1	1	0	Hindle & Pryme 1	1	0
Mort & Valentine. 1	1	0	Park & Smalley 1	1	0
Robert Moss 1	1	0	Cardwell & Birley 1	1	0
Robert Mather 1	1	0	Robt. Hawkshead 1	1	0
Wm. Green 1	1	0	Joseph Lancaster. 1	1	0
John Pilkington 1	1	0	John Thornton 1	1	0
Wm. & Jas. Carlile 1	1	0	Smalley & Free-		
James Thweat 1	1	0	eleton 1	1	0
James Darbyshire 1	1	0	Alexr. Kay 1	1	0
James & T. Naylor 1	1	0	Thos. Bolton 1	1	0
Js. Isherwood, for			Ellenthorp & Rison 1	1	0
Mr. Leigh 1	1	0	Watson, Myers, &		
Daniel Kay 1	1	0	Co 1	1	0
John Bradshaw 1	1	0	Thos. Armitriding 1	1	0
Alker & Higson 1	1	0	Thos. & Jas. Cow-		
Robert Greenhalgh 1	1	0	burn 1	1	0
John Ashworth 1	1	0	Jonas Crowther 1	1	0
Josiah March 1	1	0	Legendre Starkie,		
James Seddon 1	1	0	Esq 1	1	0
George Leigh 1	1	0	- Whalley, Esq. 1	1	0
George Wakefield 1	1	0	Peel, Yates, & Co. 1	1	0
Jas. Wardle 1	1	0	Peter Drinkwater. 1	1	0
Thos. Barton 1	1	0	Josiah Bireh 1	1	0
Geo. Green & Sons 1	1	0	Jas. Potter 1	1	0
Jas. Wood 1	1	0	Brodock & Edge 1	1	0
James Currie 1	1	0	Entwisles 1	1	0
Saml. Arrowsmith 1	1	0	Bartons 1	1	0
John Sudell 1	1	0	Barrows 1	1	0

£	s.	d.	£ s. d.
Mills 1	1	0	Joseph Aspindale. 0 10 6
Peter Marsland 0	10	6	William Cannon 0 10 6
Edward Rothwell. 0	10	6	Robert Dearden 0 10 6
Lawr. Taylor 0	10	6	Thos. Johnson 0 10 6
Jas. Morris 0		6	James Rodgers 0 10 6
Peter Ainsworth 0	10	6	J. Lancaster's ser-
Thos. Ridgway \ 0	10	6	vant 0 10 6
James Ridgway \ 0	10	6	Smith & Briscow 0 10 6
James Lomax 0		6	Jno. Warburton 0 10 6
Adam Fletcher 0	10	6	Day Barker 0 10 6
Thos. Martin 0	10	6	James Astley 0 10 6
Thos. Nuttall 0	10	6	John Bentley 0 10 6
Wm. Cocker 0	10	6	Rodger Smith 0 10 6
Thomas Horrocks. 0	10	6	Wm. Mosley 0 5 6
John Horridge 0	10	6	Giles Holding 0 7 6
Thomas Smith 0	10	6	

No. V. - Page 165.

A GENERAL CERTIFICATE signed by the great Commercial Firms and Manufacturers of the North in 1812, and laid before the Chancellor of the Exchequer the Right Honourable Mr. Percival, M.P., &c. &c.

We, the undersigned, being interested in the cotton manufacture, certify that we are perfectly satisfied with the correctness of the memorials prefixed, and are convinced of Mr. Samuel Crompton's just claim to public remuneration for the originality, utility and extent of his improvement in cotton spinning.

John Pilkington, Thomas Ridgway and Sons. Thomas Ainsworth and Co. Peter Ainsworth and Son. Samuel Oldknow. Philips and Lee. McConnell and Kennedy. Greg and Ewart. Peter Marsland. James Robinson. A. and George Murray. Nathaniel Gould. H. and W. Fielden. Richard Birley. William Yates. William Fox. John Simpson. Horrocks and Co. John Gladstone. John Forster. Ewart. Ratson and Co. George Case.

Thomas Earle.

Birley and Hornby. James Kennedy. James Bateman. Robert Peel, Jun.* Peel, Yates and Co. Thos, and Jno. Drinkwater. J. T. and G. Touchet & Co. Henry & Jno. Burton & Co. Arthur Clegg. William Douglas and Co. William Jones. William Roscoe.* James Finlay and Co. The New Lanark Co. James & John McHasham. Henry Houldsworth. James Dunlop. R. Thomson and Son. William Sterling and Sons. Todd. Shorbridge and Co. William and John Orr. For the Linwood Company, Andrew Brown.

^{*} It will be noticed that Mr. Crompton's reputation obtained for him the disinterested patronage of men eminent in statesmanship and in literature.

No. VI. — Page 167.

PETITION of Mr. CROMPTON respecting his machine called a Mule.

House of Commons,

Thursday, March 5th, 1812.

A Petition of Samuel Crompton, of Bolton-enle-Moors, in the county of Lancaster, cotton spinner, was brought up and read, setting forth:

That in the year 1769, Sir Richard Arkwright obtained a patent for the use of a machine by him invented for spinning cotton, commonly called a water-frame, the benefit of which invention he exclusively enjoyed during the full period of fourteen years, and derived great advantage therefrom; and that the above machine, though excellent for the purposes to which it could be applied, was exceedingly limited in its application, it being from its construction utterly incapable of spinning weft of any kind, or of producing twist of very fine texture; and that to remedy this defect the petitioner in the year 1779 completed the discovery of a machine now called a mule, but which, for several years, bore the name of the Hall-in-the-Wood wheel, from the name of the then place of residence of the petitioner; and that the petitioner's machine not only removed the pre-existing defects in the art of spinning by being capable of producing every then known description of weft, as well as twist of a very superior quality, but gave birth to a new manufacture in this country of fine cambrics and muslins, by producing yarns of treble the fineness, and of a much more soft and pleasant texture, than any which had ever before

been spun in Great Britain; and that the merit of the petitioner's machine soon brought it into general use, and has been the means of extending the cotton manufacture to more than double the amount to which it was before carried, whereby all persons employed in the cotton manufactory and the public in general, have been greatly benefited; and that notwithstanding the great and numerous advantages derived by this country from the petitioner's labours, the petitioner has hitherto received no adequate reward for his discovery, the petitioner having in the first instance been induced to give his discovery to the public by the solicitations of a great number of very respectable merchants and manufacturers; and that the petitioner stated his case to the officers of his Majesty's government, and was not able to obtain their determination thereon until the time limited by the house for receiving petitions for private bills had elapsed; and praying that leave may be given to present a petition for such remuneration for his said discovery, and giving up the use thereof for the benefit of the public, as may be deemed meet.

Ordered to be referred to a committee, with power

to send for persons, papers and records.

Cobbett's Parliamentary Debates, vol. xxi. p. 1174.

No. VII. — Page 168.

REPORT on Mr. CROMPTON'S Petition.

The Committee to whom the Petition of Samuel Crompton, of Bolton-en-le-Moors, in the county of Lancaster, cotton spinner, was referred, and who were empowered to report their observations thereupon to the house, and also the minutes of the evidence taken before them, have, pursuant to the order of the house, examined the matter of the said petition, and have agreed upon the following report:—

Your committee have called before them several witnesses, whose evidence they have hereunto subjoined; and beg leave to state, that from the evidence so adduced before them, it appears to your committee the petitioner has fully proved his claim as to the discovery of the machine called "The Mule," described in the said petition; and that it also appeared from the said evidence that the public have for a long course of years derived great and extensive benefit from the use of the said machine, but that the petitioner has derived little or no advantage therefrom; in consequence of which your committee beg leave to observe that the petitioner appears to them to be highly deserving of a national reward.

MINUTES OF EVIDENCE.

Committee on the Petition of Mr. Samuel Crompton.

Mercurii, 18° die Martij, 1812.

The Lord Stanley in the Chair.

Sir Robert Peel, a member of the committee, stated,

That in the year 1769, Sir Richard Arkwright obtained a patent for the use of a machine, by him invented, for spinning cotton, commonly called a water-frame, the benefit of which invention he exclusively enjoyed during the full period of fourteen years, and derived great advantage therefrom; and the above machine, although excellent for purposes to which it could be applied, was exceedingly limited in its application, it being, from its construction, utterly incapable of spinning weft of any kind, or of producing twist of very fine texture.

Mr. John Pilkington, merchant and manufacturer at Bolton, called in, and examined.

At what period were you first acquainted with Mr. Crompton's machine? — I did not see it till the year 1780, when the yarn produced by Mr. Crompton from his machine drew the attention of the cotton manufacturers. At that time I went to Mr. Crompton's house, and I saw his machine: soon after which I drew up a paper with a view to obtain for Mr. Crompton a reward for making public his invention, by subscription amongst the manufacturers; but the amount of which subscription proved very inadequate to my expectations and my opinion of his deserts.

Has Mr. Crompton's invention produced any material improvement and extension in the cotton manufacture? — Previous to the invention of Mr. Crompton's machine, the muslin manufacture had been attempted, but without success; since that period, it has been progressively advancing, and at present I believe the major part of the cotton cloth manufactured in this kingdom is spun upon the machine invented by Mr. Crompton.

In consequence of drawing up that paper, and your commencing a subscription for Mr. Crompton, upon the faith of that subscription being adequate to its merits and his expectation, did he permit his invention to be made public?—It was, I think, in expectation of a much larger reward than he obtained, that Mr. Crompton permitted myself and some others to see his machine; but I saw it in confidence before the subscription was entered into.

Did Mr. Crompton allow his invention to be made public in consequence of that subscription?—Yes, but which subscription he did not know the amount of at the time he allowed his invention to be made public; and that subscription, it afterwards appeared, fell infinitely short of his and my expectations.

Do you recollect the amount of that subscription? — About £106.

Do you think the sum of money Mr. Crompton has received at different times, in any degree adequate to the utility of the invention, or to the expectations entertained?—Certainly not.

Mr. George Lee, cotton spinner, of the house of Philips and Lee, of Manchester, called in, and examined.

Does the machine invented by Mr. Crompton produce yarn superior in fineness and quality to any other machine?—It does.

Could yarns adapted to cotton, cambrics and muslins be spun equal in quality or cheapness by any other machine? — They could not.

Is Mr. Crompton's machine in general use? — In

very extensive and general use.

To what extent is Mr. Crompton's machine used?— From the most exact calculation which I have been able to obtain, there are four millions of spindles

upon Mr. Crompton's principle.

How many persons are employed directly in working machinery upon Mr. Crompton's principle?—There cannot be less than seventy thousand directly.

What quantity of cotton wool is spun by mules

annually? — About forty millions of pounds.

What would be the amount of duty paid to government upon the same materials spun by mules?—About three hundred and fifty thousand pounds an-

nually.

What is the amount of wages paid for spinning by mules, compared with all other machinery for that purpose? — Double the amount in wages is paid for spinning by Mr. Crompton's machine to that by all other machines for cotton spinning.

Do you mean that two-thirds of the cotton spinning is upon the principle of Mr. Crompton's inven-

tion? — I do.

Has the cost of yarns, and consequently of cotton cloth, been materially diminished by Mr. Crompton's

invention? - Very materially indeed.

Are you aware of the circumstances relative to a subscription that was entered into?—Yes, in the year 1800 or 1801, a number of gentlemen, thinking Mr. Crompton had been neglected, agreed to solicit subscriptions, for the purpose of making him a liberal remuneration. I attended with those gentlemen, and applied amongst others to Mr. Arkwright; Mr. Arkwright's answer was that he would contribute to it cheerfully, candidly acknowledging the merit of the invention, and at the same time observing that Mr. Crompton had been his most bitter rival, for that he had superseded the machine of his father's invention, in the finer yarns; and he subscribed thirty guineas. We collected only about

£400; we expected to have got a much greater sum; but in consequence of the distresses, from the war breaking out, we found the result of our applications very inadequate to our expectations and his deserts. From the difficulty of collecting even what had been subscribed, and still more of obtaining any addition to it, we discontinued our applications. The money which was collected was paid to Mr. Crompton, not amounting in the whole to £500 I believe.

Was that subscription commenced in consequence of any solicitation from Mr. Crompton? — No, it was spontaneous on our part, entirely from a sense

of his just claim upon the public.

Mr. James Watt, of the house of Boulton, Watt and Co., of Birmingham, called in, and examined.

Have you erected many steam engines for turning machinery upon Mr. Crompton's principle?—A considerable number; I conceive about two-thirds of the power of steam engine we have erected for spinning cotton has been applied to turning spindles upon Mr. Crompton's construction.

Mr. Thomas Ainsworth, of the house of Ainsworth and Co., of Bolton, called in, and examined.

How long have you been conversant with the cotton trade in the county of Lancaster? — About

thirty-seven years.

Can you speak as to the extent of the cotton trade thirty years ago, compared with what it is at present?—I think it is increased in proportion as twenty to one.

To what do you, in a great measure, attribute this rapid increase of the trade? — To the invention of

machinery, and most particularly that used in spin-

ning.

To what invention in spinning machinery do you most particularly allude?—The first kind of machine beyond the one spindle wheel was what was called a jenny; the next was Mr. Arkwright's, for which he obtained a patent; and the next was Mr. Crompton's.

To which of those do you most particularly allude, as imputing to it the rapid increase of the trade; or do you impute it to them altogether? — There was a progressive increase; first by the jenny, and then by Mr. Arkwright's invention; but the great increase, and that which accomplished the main object, was Mr. Crompton's.

Can you describe the principle of Mr. Arkwright's machine, and the effect it is calculated to produce?—
The thread of Mr. Arkwright's machine is made through rollers only, and twisted up to the rollers, which compels a hard thread and fit only for warps.

Wherein does Mr. Crompton's machine differ?—Mr. Crompton's machine consists of rollers, in which the thread is drawn; but after the rollers have done delivering the thread, he can accommodate it either to warp or woof.

What proportion of the present trade do you suppose the invention of Mr. Crompton has given rise to? — Full one half; I think two thirds.

To what branch of the piece goods manufactured, particularly?—To the fine fabrics, cambries and

muslins, particularly the Scotch manufactory.

How do you make out its value, as applied to the Scotch manufacture, beyond the other parts of the cotton trade? — By being of so very fine a fabric, such fine yarns being wanted for that manufacture beyond what would be wanted for the heavy cloth we manufacture in Lancashire. I do not know how the

Scotch manufacture would ever have been carried on without the yarn Mr. Crompton's machine produces, particularly book muslins.

You impute that branch of trade to the merit of Mr. Crompton's invention?—In a great measure; I think the Scotch trade is in a great measure be-

holden to Mr. Crompton's invention.

Would not Mr. Arkwight's machine have supplied that trade? — In a very limited and a very inferior way indeed, and only for the coarser fabrics; the quality of the yarn that composes a great part of the Scotch manufacture could not have been produced

without Mr. Crompton's invention.

Have you any certain knowledge that what is now called the mule is the same in principle as the Hall-of-the-Wood machine, and that it was the sole invention of Mr. Crompton?—I believe it was the sole invention of Mr. Crompton; it was generally admitted so to be at the time, and a subscription was entered into to reward him for it. The principle is the same, certainly.

How many people does this machine now employ?—I believe, by calculation, about 70,000, and

it is supposed about 150,000 weavers.

Do you conceive Mr. Crompton to have received an adequate recompense from the public for his invention? — No, I think it falls far short indeed.

You have said that the mule spins a finer kind of yarn than the other machinery, and enables the manufacturer to make a finer species of goods than could have been otherwise made?—Yes.

Is there a greater number of weavers employed in consequence of that than would otherwise have been employed? — A very considerable number.

Mr. Joseph Ridgeway, of the house of Thomas Ridgeway and Son, near Bolton, called in, and examined.

Have the cotton cloths bleached by you, and spun by mules, been increasing in quality during the last

twenty years? - Very much.

What proportion do they constitute of the whole quantity sent to you to be bleached?—At least four fifths.

Jovis, 19º die Martij, 1812.

The Lord Stanley in the Chair.

Mr. George Lee again called in, and examined.

What do you suppose is the value of the machinery, buildings and power engaged in spinning upon Mr. Crompton's principle? — Between three and four millions sterling.

24 March 1812.

No. VIII. — Page 176.

House of Commons, March 1812.

PETITION from Bolton relative to Parliamentary Reform, &c.

Mr. Whitbread presented a petition from the inhabitants of Bolton-in-the-Moors, assembled to public advertisement, setting forth:

That many of the petitioners are, in consequence of the depressed state of trade, in a situation of extreme distress, and that the distress approaches so nearly to actual starvation that they think it would be highly imprudent any longer to delay communicating their situation to the house; and that immense numbers of the industrious manufacturers in this neighbourhood are reduced to the necessity of working for less than one-fourth of what they would previous to the commencement of the war with France, whilst the necessaries of life are, since that period, nearly doubled in price; and that they are convinced by sad and dear-bought experience that the expensive war in which this country has been so long engaged is the immediate cause of the distresses they now labour under; and that the continuance of this war, and most of its concomitant evils, are attributable to the imperfect representation of the people in the house; and it is the humble opinion of the petitioners that if the house consisted of representatives of the people only it would not for any doubtful prospect of benefit to our allies consent to expose the people of this country to the certain misery, ruin and starvation which the continuance of the war must bring upon them; and that though the petitioners have on many occasions been proud to express their loyalty and patriotism, and their willingness to sacrifice their lives if necessary in defence of their invaluable constitution, yet they cannot help shrinking from the horrible form in which death now seems to await them and their helpless families, unalleviated by any circumstances of glory or of advantage to their beloved country: and praying that the house would take into its serious consideration the privations and sufferings of his Majesty's loval subjects in their popular district, and will devise some speedy means of relieving them: and further that the house will, by all the means in its power, bring about the so much wished for reform in the representation of the people; and will also recommend to his Royal Highness the Prince Regent that no means be left untried which are likely to restore to his Majesty's loyal and long-suffering people the blessings of peace.

Ordered to lie upon the table.

Cobbett's Parliamentary Debates, vol. xxii. p. 30.

No. IX. - Page 222.

CROMPTON'S Second PETITION to the House of Commons, drawn up by Mr. Brown.

[In manuscript.]

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled. The humble petition of Samuel Crompton, of Bolton-le-Moors,

Lancashire, sheweth:

That in March 1812, your petitioner applied to your honourable house by petition, praying for a remuneration, having in 1779 completed the invention and construction of a machine for spinning cotton yarn, afterwards known by the name of the mule, and, in 1780, giving it up to the general use of the cotton manufacturers; that a committee was appointed, to which the said petition was referred, whose report certified, in the most flattering and unqualified terms, that your petitioner appeared to them highly deserving a national reward.

That owing to the dreadful catastrophe which,

very soon afterwards, befel the then Chancellor of the Exchequer, your petitioner was placed in a most disadvantageous situation, the melancholy occurrence alluded to depriving him of every opportunity of making any communications, or of receiving those official explanations which his interests required, touching the amount of the national reward recommended by the said honourable committee.

That your petitioner has heard, and believes, that the official successor to the then Chancellor of the Exchequer, on coming into office, as a matter of course or of courtesy, adopted the sum of five thousand pounds as the amount of the said national reward, he having found that sum inserted in the official documents connected with your petitioner's

claim, and left by his predecessor.

That ten thousand pounds having, in 1809, been granted by parliament as a reward to the inventor of the power-loom weaving machine, it occurred to your petitioner that the cause of the parliamentary grant allotted to your petitioner in 1812, as an equivalent for having invented and given up the mule to the public, amounting to only half that sum, whilst the known value and utility was so incomparably superior, might have arisen from the casual and unintentional omission on the part of the gentlemen manufacturers who managed your petitioner's case in 1812, of facts or circumstances necessary to the full and complete illustration of his case; your petitioner respectfully states that, as refers to the surrender of your petitioner's invention to the public in 1780, it did not, as erroneously represented, arise from inability to complete the machine without pecuniary aid, afforded by public subscription, for the mule was perfectly finished, and had then been used by your petitioner for several months; nor was it

from the effect of indigence, but from the vexatious interruptions occasioned by immoderate and obtrusive curiosity, impelling crowds of weavers and spinners to wish to see and examine an engine which had produced cotton yarn of a quality so far superior to any ever seen by them before: and your petitioner was also influenced by apprehensions of danger, arising from popular violence, excited by the powerful prejudice which prevailed against spinning machines, and which had then recently been displayed at Bolton-le-Moors in the destruction of

buildings and machinery by rioters.

That your petitioner's loss did not end with the surrender of the *mule*, for after he had surrendered his invention, on the faith of their promises of an equivalent, those persons enticed your petitioner's spinners from his service, being animated by an opinion that having been taught to spin mule-varn by your petitioner, they were much more valuable than any others; and from the effect of this oppressive and injurious practice, which continued during several years, it obliged your petitioner to desist from spinning, and thus, in addition to the loss of an invention which as a speculation he should have thought cheap at fifty thousand pounds cost if the full enjoyment of its emolument for fourteen years had been secured to him, your petitioner was also cruelly and insidiously debarred of the free use of his own invention as a master spinner, at a period when the profits were the greatest; your petitioner then commenced cotton manufacturer, and even in this walk, as your petitioner's letter of 1807 to the late Sir Joseph Banks evinced, public curiosity still pursued your petitioner's steps with as great avidity as ever, and almost with as injurious results; and thus whilst your petitioner's mechanical inventions

diffused abundant wealth to thousands, your petitioner and his family have remained rather spectators than partakers of the national wealth thus created.

That whilst the mule produced cotton yarn of an unrivalled quality and fineness, it caused a reduction of price no less remarkable; sixty hanks water-frame twist, which sold at twenty shillings per pound above the price of the cotton wool in 1780 when mule yarn came into general use, was reduced in price in the

proportion of twelve parts out of thirteen.

That at the period when your petitioner surrendered his invention to the public, the East India Company supplied Great Britain and Ireland with fine muslins and calicoes, all preceding attempts to establish the muslin manufacture having failed, through the want of such yarn as the mule afterwards supplied, which rapidly superseding Bengal muslins, speedily became a leading article not alone of home consumption, but of a most extensive and advantageous export trade of British manufactured cottons.

That it appears, from parliamentary documents, the total amount of cotton wool imported into these kingdoms on an average of five years prior to the invention of the *mule*, was not quite seven million pounds weight per year; that the yearly average of the next five years following its introduction was close upon eleven million pounds each year; in 1794 mule twist was exported to the Continent of Europe; in 1797 the importation of cotton wool amounted to twenty-seven million pounds weight annually.

That it was proved in 1812, by the most respectable and experienced cotton spinners and manufacturers of Lancashire, in support of the allegations contained in support of your supplicant's petition, that sixty million pounds weight of raw cotton was

imported in 1812; that seventy thousand persons were then employed upon mule spinning; that forty million pounds weight of cotton wool was spun into varn by the mule; that the duty on the raw cotton spun by the mule amounted to three hundred and fifty thousand pounds in that year only; that the fixed capital invested in mule factories was between three and four million pounds sterling; that twothirds of the power of steam-engines erected by Bolton and Watt in cotton factories had been applied to turn spindles on your petitioner's construction; that the mule gave rise to the Scotch manufacture of fine muslins and cambrics, and furnished employment to above one hundred and fifty thousand cotton weavers; and the most eminent bleacher of Lancashire stated that at least four-fifths of the whole quantity of goods he bleached consisted of fabrics formed from mule varn.

That it is stated, in parliamentary documents, the cotton manufacture increased in its export trade between the years 1791 and 1816 full twenty million pounds sterling per annum; that in the same space of time the export of woollen goods had increased little more than two millions; and it was acknowledged by numerous witnesses, many of whom were personally unknown to your petitioner, that the mule, by the superior yarn it furnished, was the well-spring

and fountain of this vast commerce.

That so complete has been the triumph of the *mule* over all preceding inventions that it not only superseded India muslins in domestic use, but enabled spinners and manufacturers to export to India cotton yarn, manufactured into cotton goods, to the amount of millions sterling annually.

That from the average weight of cotton imported during seven years ending in 1825, amounted to one hundred and forty-five million pounds a year, being an increase of upwards of eighty million pounds since 1812, the great bulk of which was spun upon the *mule*; and the amount of exports in manfactured cottons, in 1825, was estimated at thirty million

pounds sterling.

That the merchants, cotton spinners and manufacturers of Manchester, in a petition addressed to your honourable house in 1812 or 1813, stated that ten millions sterling fixed capital was then invested in cotton mills and machinery; and George Augustus Lee, Esq., an eminent cotton spinner, whilst he imputed the vast expansion of the cotton manufacture to the invention of the *mule*, stated in a circular trade-letter, dated April 1812, the same total of fixed capital invested in mills and machinery only. The same gentleman, in a parliamentary investigation in 1816, declared that since your petitioner's invention of the mule in 1779 there had been no new invention in the art of spinning cotton yarn. In 1818, before a committee of the House of Lords, relative to Sir Robert Peel's bill for the better regulation of cotton factories, Archibald Buchanan, Esq. stated upon oath that he believed the amount of fixed capital invested in cotton factories, buildings and machinery alone amounted to eleven or twelve millions; and as the mule in 1812 was proved to spin from two-thirds to four-fifths of all the cotton wool manufactured in Great Britain, it results that at least ten millions of this capital was invested upon mule spinning; and the weight of mule yarn exported and the value of exported manufactured goods, no less than the great and palpable addition to the number of factories and machinery since 1812, all announce that the mule had scarcely arrived at its middle point of progress in 1812.

That your petitioner approaches your honourable house with clean hands and a clear conscience, not having in any way infringed or usurped another man's invention, nor can he be morally held responsible for the evils of the factory system, as factories formed no part of your petitioner's original design; and it is a fact notoriously known to cotton spinners accustomed to both modes of spinning, that the mule is very materially less injurious to young persons than the water-frame or throstle, supposing them to work the same number of hours; and your petitioner, in this second application, is preceded by petitions to the board of trade, praying for a further and more adequate grant to your petitioner, signed by names eminent for wealth, science and respectability in the machinery line and the cotton manufacture.

Lastly, your petitioner, succumbing under the weight of age and sorrow, and presuming that his claims to a second remuneration from your honourable house are not in any way inferior to those of any of the meritorious individuals who have been favoured with *more* than one grant from parliament, humbly prays your honourable house to take these facts into liberal consideration, and cheer the close of a laborious and not unsuccessful life by a national

reward suitable to the occasion.

And your petitioner shall ever pray.

6th February 1826.

No. X. - Page 225.

Mr. BALLY'S Phrenological Report on the Bust of Mr. Samuel Crompton.

THE CEREBRAL DEVELOPMENT.

The Animal Feelings.

	v
SIZE	SIZE
1 Amativeness 4 to 5	8 Acquisitiveness 4
2 Philoprogenitiveness 5	9 Constructiveness 5 to 6
A Concentrativeness 5 to 6	* Alimentiveness 3
3 Inhabitiveness 4	† The Love of Life 3 to 4
4 Adhesiveness 4 to 5	
5 Combativeness 5	11 Love of Approbation 5 to 6
6 Destructiveness 5 to 6	
7 Secretiveness 5	

The Moral Sentiments.

The Broth Bentiments.	
SIZE	SIZE
13 Benevolence 4	18 Marvellousness 4 to 5
14 Veneration 5	19 Ideality 4 to 5
15 Firmness 5	20 Wit or Mirthfulness 3 to 4
16 Conscientiousness 5	21 Imitation 4 to 5
17 Hope 6	

The Intellectual Powers.

SIZE	SIZE
22 Individuality 5	30 Eventuality 3 to 4
23 Configuration or Form 4 to 5	31 Time 4
24 Size 6	32 Tune, Melody, or Sound 4
25 Weight and Resistance 5 to 6	33 Language 3
26 Colouring 4	34 Comparison 4
27 Locality 5	35 Causality 4 to 5
28 Calculation 4 to 5	
29 Order 4 to 5	

General size of the Head.—Anterior lobe: large perceptive, rather large reflective.—Coronal region above Cautiousness: large.—Ditto above Causality: full.—Regions of the Animal Propensities: posterior, rather large; middle lobes, large.

Of the Temperament. — The individual possesses two parts of the sanguine, a very small part of the bilious, and two parts of the nervous.

NOTE omitted, page 25.

Richard Crompton Esq., the last male representative of another collateral branch of the family, died in August 1854, at a comparatively early age, after acquiring a considerable fortune as a cotton spinner in Bolton. His charities were liberal and unknown during his lifetime, though many of them were revealed at his death. He died intestate, but his sisters, aware of his intentions (had he lived to carry them out), presented £500 to the Bolton Ragged Schools and £300 to the Bolton Infirmary in the name of their deceased brother.

THE END.

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